



**ERENCE WEICKER & COMPANY**

## **Maple Ridge High Tech Investment Attraction Strategy**

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**Final Report Prepared for the  
District of Maple Ridge**  
February 13, 2009

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## **EXECUTIVE SUMMARY**

### **PURPOSE OF THE PROJECT**

In 2006, the District of Maple Ridge prepared a five year Economic Development Strategy. The Strategy identified technology as a sector for which opportunities for development may exist for Maple Ridge and which would be worthy of further investigation. The Strategy also noted that there is community support for further development of the high technology sector.

Building on the Economic Development Strategy, the purpose of this assignment is to:

- Review the potential to attract further investment related to the technology sectors taking into consideration the requirements of those sectors;
- Determine if and when Maple Ridge should move forward with efforts to attract components of the technology sector to the community; and
- Provide recommendations regarding how Maple Ridge could proceed, taking into consideration investment promotion activities and infrastructure requirements.

### **METHOD OF STUDY**

We are conducting this study in three phases. The primary objective of the first phase was to prepare a detailed work plan. The second phase involved interviews with a sample of technologies businesses located in Maple Ridge and other communities as well as a sample of selected experts. We conducted interviews with 25 selected experts, 24 Maple Ridge technology companies, and over 100 technology companies located in other communities and drawn from a variety of technology sub sectors, such as digital film, web services and telecommunications. This resulted in a report covering the first two phases, which was submitted to the District in September 2008.

After the report was reviewed by the District, Ference Weicker provided a presentation on the report to the Economic Advisory Commission (EAC), and received feedback. After the presentation, a conference call of an informal subcommittee provided more detailed feedback. This feedback has been incorporated into the third phase, which is this report.

### **THE DISTRICT OF MAPLE RIDGE**

The District of Maple Ridge, which covers an area of 260 square kilometres, is situated on the north shore of the Fraser River, south of the coastal mountains, 45km east of the city of Vancouver and 40km from the US border. The community is bounded on the north by the Golden Ears Mountains and on the south by the Fraser River. The Stave and Pitt Rivers form the eastern and western boundaries. Maple Ridge is ideally located in the central Fraser Valley.

Over the past decade Maple Ridge has been one of the fastest growing municipalities within the Lower Mainland. Growth has averaged approximately 3.7% annually resulting in a population of about 75,000. BC Stats projects that the population of Maple Ridge will reach 93,700 by 2021 and 108,900 by 2031. Currently 65% of the workforce commutes outside of Maple Ridge on a daily basis.

## OPPORTUNITY TO ATTRACT HIGH TECH INVESTMENT

There are some opportunities to attract investment from the high tech sector given that:

- **The high technology industry is one of the largest sectors in British Columbia.** On a chained dollar basis, the high technology industry accounted for 6.4% of provincial GDP in 2006, placing it ahead of most other industries including retail, wholesale, construction, wood products, forestry, and agriculture.
- **The sector is undergoing rapid growth.** The revenues of the high technology industry increased from \$8.9 billion in 1997 to \$15.9 billion in 2006, equal to an average annual increase of 6.2%. Growth is driven by growing markets and competitive strengths associated with BC and, more specifically, the Lower Mainland in areas such as market access, research and development infrastructure, attractive locations, well educated people and access to capital.
- **As it grows, the sector makes significant new investments.** Forty-two percent of the technology companies we interviewed from both Maple Ridge and other communities are definitely planning a significant new investment over the next three to five years. These companies are planning to make over \$80 million in investments which they anticipate will create almost 800 new positions.
- **The sector is relatively footloose in terms of where it locates.** Although the companies whom we surveyed wish to remain located in the Lower Mainland, many are open to considering different communities within the region. On average, the companies estimate that there is a 42% likelihood that they will make their new investment outside of their existing community.

However, there is strong competition for this investment from other communities given the high paying jobs, environmental attractiveness, and potential spin-offs associated with the industry.

## COMPETITIVE POSITION OF MAPLE RIDGE

The relative attractiveness of any region as a location for investment is a function of a number of key building blocks or economic drivers including investors' perceptions of the region, quality of life, access to markets, transportation infrastructure, access to land, access to labour and management skills, access to financing, and access to other key inputs and supports. According to the results of our interviews and review of background information, some of the key competitive advantages of Maple Ridge are as follows:

All groups were asked to identify what they perceive to be strengths and competitive advantages of Maple Ridge as a location for investment. These included:

- The District offers technology companies lower costs in terms of housing, operating costs and business leases and land relative to other areas in the Lower Mainland.
- The high quality of life in Maple Ridge.
- Much improved transportation. The two new bridges and highway improvements will improve ease of access and reduce commuting and travel times.
- A strong local business community.

- Growing population base which affords people an opportunity to live close to work.

However, the representatives also identified a number of weaknesses which can constrain the ability of Maple Ridge to attract investment from the high tech industry. The low profile of the region is a major weakness. The results of our interviews indicate that much of the sector has very little knowledge of Maple Ridge. Often, representatives have not visited the region or may have visited but are not very familiar with what the community has to offer.

Other concerns relate to transportation issues (e.g. transit, highway access, and distance from Vancouver International Airport), the communications infrastructure (e.g. broadband), the absence of major technology companies or anchors around which the cluster could develop, and access to skilled workers. Representatives noted that there is strong competition from other Lower Mainland communities, most notably Vancouver, Richmond, and Burnaby.

## **RECOMMENDATIONS**

Based on the results of our research, we have developed a set of recommendations regarding investment attraction activities which we have grouped under four themes: target, communication, business environment, and relationships.

### ***TARGET: Clearly define the focus and objectives of the investment attraction strategy***

As part of this process, it will be important to:

- ***Define the target sectors for investment attraction broadly.*** This report has focused on the high technology sector. While opportunities for investment attraction exist in this sector, there are also opportunities that may be as or even more significant in a wide variety of other sectors. For example, the District has a track record in attracting investment related to cedar products and machinery, forestry and forestry research, film, light manufacturing, occupational training, agricultural and the retail/commercial sectors. Obviously, Maple Ridge is well positioned to host any number of sectors, based on its location and infrastructure.
- ***Focus on both resident and non-resident companies.*** Businesses already existing in the community will be a major source of new investment. Providing aftercare services to local companies can not only help retain their existing operations but also facilitate reinvestment, expansion, and diversification.
- ***Determine how aggressive the investment attraction activities should be.*** The priority that should be placed on investment attraction activities will be a function of the availability of space suitable for prospective businesses, the availability of funding for promotional activities, and the objectives of the District with respect to growth.
- ***Focus on companies that are most accessible to Maple Ridge.*** Priority should be given to companies with a significant presence in the Lower Mainland (i.e. it is easier to attract companies that are familiar with, and serve customers from, this region).
- ***Build on the existing activities and capabilities of the Economic Development Department.*** The Economic Development Department provides a “one-stop shop” of information and support for potential businesses, site selectors and potential investors including data such as real estate costs, labour rates, taxation levels, and local infrastructure as well as information and assistance with respect to registrations, work permits, and licensing. The District and Economic Development

websites contain information on business development, sales and leasing inventory, starting your own business, 2010 business opportunities, city land opportunities, land development and building, and licensing.

- **Track the results.** The Economic Development Department should produce a short summary of the results from each trade show, event and promotional program, use a database to track the status of leads, conduct a periodic survey of businesses, and produce an annual report for review by the Economic Advisory Commission, community and key funding sources.

### ***COMMUNICATIONS: Develop and implement a strong communications program***

The communications program should stress the competitive strengths of Maple Ridge, which were outlined in the previous chapter. Components of the communications program could involve:

- **Establish a strong, clear and consistent brand for Maple Ridge.** Maple Ridge needs to establish a higher profile which includes a clearly defined identify. Establishing a strong brand may involve conducting research to determine the most appropriate brand positioning, clearly defining the audience for the brand positioning (e.g. existing and potential residents, workers, visitors, and businesses), and developing and implementing communication strategies and programs that support the brand. The development of a clear brand will require the coordinated participation of a wide variety of initiatives and organizations.
- **Introducing an earned media program.** An earned media program can be a highly effective promotional tool for targeting potential high technology companies. Earned media can trigger interest amongst potential companies to ensure the District is on the initial consideration list as well as raise awareness of the area's competitive advantages. Research has indicated that articles in newspapers and magazines are the most influential source of information in the location decision for senior executives. Actions that can be taken to generate earned media include:
  - Developing relationships with local, national and international media outlets.
  - Encouraging local companies, politicians and government representatives to interact with media representatives regularly during trade missions, special events, and trade shows to generate news stories or feature profiles.
  - Hiring independent writers to develop articles for submission to various publications.
  - Staging familiarization tours, hosting one or more writers from various publications who will then develop their own stories.
- **Continuing to upgrade the website over time.** Over the past 10 years, websites have supplanted promotional and informational materials such as brochures, investment guides and information pieces as the most important marketing tools for IPAs.
- **Developing targeted collateral materials and implementing advertising or media promotions program.** The brand identify of the website should carry through to the marketing materials. Collateral marketing materials could include inserts (relevant to specific targets and sectors) to be distributed in a standard folder as well as standard PowerPoint presentations that can be quickly adapted for specific situations. Another option is to strategically place advertisements in trade magazines and other publications. Publications such as *Business in Vancouver* and *BC Business* were mentioned as good examples of how Maple Ridge should promote to technology companies.

Other magazines identified include *Reel West*, a publication source of information for film, video and multimedia production, and *Backbone* magazine, a Vancouver-based publication focusing on technology and business integration. There may also be opportunities to communicate through promotion on virtual communities like Techvibes, Facebook, Youtube and Blogger.

- **Attendance at targeted trade shows.** The strategic use of trades shows can involve pre-show marketing (following up with past leads and working to generate new leads in advance of the show), logistical planning and support, implementing the planned activities (e.g. staffing a booth, hospitality events, making presentations to local offices and business groups, and implementing an associated earned media program), and following up with leads shortly after the show to capitalize on the opportunities identified.
- **Placing a priority on establishing personal contact.** The most successful programs tend to place a high priority on making personal contact with key target groups through meetings, seminars and conferences; hosting target businesses, site selectors, and realtors at special events; and participating in outgoing missions (e.g. sales calls).
- **Responding to inquiries and provide other investor support services on an as needed basis.**

***BUSINESS ENVIRONMENT: Strengthen infrastructure and build a strong business environment that is appealing to target companies***

Access to suitable commercial and industrial space, key infrastructure, and a positive business environment can have a significant impact on investment attraction strategy. To this end, the District of Maple Ridge should consider:

- **Strengthening the telecommunications and transportation infrastructure.** The District has developed a broadband plan that would provide various District departments with broadband connections. If developed and built, broadband service could be used as a tool to help attract companies, especially those with the need for significant data transfers. The District could also look at expanding the free wireless downtown project to other areas. There has also been a need identified to improve the transit system to meet the needs of new neighbourhoods and commercial and industrial build outs.
- **Assess the current and projected supply of suitable commercial and industrial space.** A high technology sector attraction program needs to be consistent with availability of suitable commercial and industrial space. The District and the Economic Development Department should continue to work with landowners, developers, realtors and the industry to maintain an inventory of technology friendly sites. For instance, the downtown area has free wireless service which may be attractive to smaller, start-up companies. Maple Ridge has a core of existing technology companies that could be built upon. Finally, there may be an opportunity to develop a technology centre or park in some of the commercial or industrial areas of the District.
- **Review available and possible incentives to attract high technology companies.** Local businesses recommended continuing efforts to improve zoning to reflect the special needs of the sector, and improving the building and permitting processes to ensure timely delivery. There may also be a need to review the tax landscape, to ensure that Maple Ridge is competitive with other jurisdictions. Also, there is a need to maintain up-to-date information on available municipal, provincial, federal incentive programs and other assistance that could help the high technology sector.

- **Work with educational organizations to promote high technology education.** This could include encouraging institutions to locate in Maple Ridge, or to offer or expand specific programs. The District has developed linkages with Douglas College, which has the Thomas Haney campus in the District, and is close to the UBC Malcolm Knapp Research Forest. Wherever possible, efforts should be made to integrate educational programming with local industry, government agencies, and educational organizations.

***RELATIONSHIPS: Build strategic relationships with others who can support investment attraction***

As part of the investment attraction strategy, the Economic Development Department should:

- **Maintain on-going channels of communication with existing businesses** (through joint activities, meetings and periodic surveys) as a means to keep abreast of the key issues which will impact upon both business retention and investment attraction.
- **Establish a business ambassador program to assist with investment attraction.** Building on the existing relationship with businesses, consideration should be given to the development of a businesses ambassador program. Ambassadors are existing businesses in community that volunteer to help promote Maple Ridge at meetings, events and conferences by handing out materials (e.g. brochures and CD's with information about the community) and referring prospective businesses to the Economic Development Department. Ambassadors may also participate in hosting visits from businesses considering relocation to Maple Ridge.
- **Partner with other organizations that have a mandate related to investment attraction.** Successful programs typically involve strong partnerships with the Chamber of Commerce, educational organizations, other industry organizations, companies, government and other stakeholders. These partnerships can be informally based, project oriented, or can take place over time working in conjunction with a consortium or long term marketing objective. In addition to working with private sector companies, there are opportunities for Maple Ridge to coordinate activities with other municipalities located along the north Fraser in encouraging companies to locate in the region as well as work with other organizations such as Invest BC and Linx BC.



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## I. INTRODUCTION

### A. PURPOSE OF THE PROJECT

In 2006, the District of Maple Ridge prepared a five year Economic Development Strategy. The Strategy identified technology as a sector for which opportunities for development may exist for Maple Ridge and which would be worthy of further investigation. The Strategy also noted that there is community support for further development of the high technology sector.

Building on the Economic Development Strategy, the purpose of this assignment is to:

- Review the potential to attract further investment related to the technology sectors taking into consideration the requirements of those sectors;
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- Provide recommendations regarding how Maple Ridge could proceed, taking into consideration investment promotion activities and infrastructure requirements.

### B. METHOD OF STUDY

We are conducting this study in three phases. The primary objective of the first phase was to prepare a detailed work plan. The second phase involved interviews with a sample of technologies businesses located in Maple Ridge and other communities as well as a sample of selected experts. This report summarizes the results of the first two phases including the interview results, incorporates feedback on the first two phases, and is the third phase report.

#### Phase I: Preparation of the Detailed Work Plan

The work that we undertook to prepare the detailed work plan included:

- Met with representatives of the District of Maple Ridge to develop a mutual agreement of the scope and purpose of the assignment. The representatives included the Chair of the Economic Advisory Commission, senior officials of the District of Maple Ridge, and the Manager of the Economic Development Department.
- Reviewed available information and previous studies on the characteristics of Maple Ridge. Some of the documents and information that we reviewed include:
  - *Maple Ridge Economic Development Strategy*, October 2006
  - *Official Community Plan, District of Maple Ridge*, 2006
  - *Economic Base Analysis for the District of Maple Ridge*, January 2005
  - *Choosing a Sustainable Future for Metro Vancouver*, November 2007
  - *The Maple Ridge Town Concept Plan*, March 2005
  - *District of Maple Ridge Community Profile*, March 2007

In addition, we reviewed the District of Maple Ridge and Maple Ridge Economic Development web sites as well as statistics published by BC Stats and Statistics Canada. Based on the results, we prepared a brief overview of the community and identified examples of technology companies which are currently operating there.

- Reviewed reports and industry profiles related to the high technology sector. Based on the results, we have highlighted some of the major characteristics of the technology sector in BC and developed a preliminary profile of various components of the sector.
- Reviewed investment attraction strategies, activities and models implemented by other organizations. As part of this process, we conducted a literature search to update the results of research we have conducted in the past. We also reviewed the site selection process, key selection criteria used by companies in selecting a location for their operations, and best practices associated with investment promotion.
- Prepared an analytical framework for the assignment. The analytical framework defines the research questions and stipulates how the information collected from surveys and secondary sources will be used to address each of the research questions.
- Prepared draft survey instruments to conduct interviews with businesses and other representatives.

### **Phase II: Detailed Assessment and Strategy Development**

The major components involved in Phase II included:

- **Conducted interviews with a sample of 24 Maple Ridge companies** associated with the technology sector. We obtained input from the companies regarding recent investments and investment intentions, locations being considered, the likelihood of investment in Maple Ridge, the key location criteria for investment decisions, the relative competitive position of Maple Ridge, and actions that could be taken to encourage companies to invest.
- **Conducted interviews with a sample of 25 key informants** including representatives of the Economic Advisory Committee, District staff, technology associations, and others. The purpose of these interviews is to obtain input on potential targets for investment attraction, current industry conditions which impact on the ability to attract new investment to Maple Ridge, perceived likelihood of attracting new investment, and recommended strategies and actions.
- **Conducted interviews with a sample of 101 companies active in the technology sector** in other regions of the Lower Mainland, BC, and neighbouring jurisdictions. The purpose of these interviews is to obtain input regarding recent investments and investment intentions, locations being considered, the likelihood of investment in Maple Ridge, the key location criteria for investment decisions, the relative competitive position of Maple Ridge, and actions that could be taken to encourage companies to invest there.
- **Conducted a brief review of the investment promotion activities** undertaken to date by Maple Ridge and possible parameters for future marketing activities. We also reviewed plans related to the fibre optic network.
- **Conducted a brief review of investment attraction strategies** implemented by other communities and regions.
- **Produced an interim report summarizing the major findings to date.**

### Phase III: District Feedback, Target Sectors, Recommendations

In this the final report:

- **We incorporated feedback from the District, EAC and Economic Development Department.**
- **Evaluated target the sectors identified as high priorities.** We identified various strategies that have been used effectively to attract investment and assess the appropriateness of those strategies in light of the characteristics of the key target sectors and the resources that will be available for implementation.
- **Developed recommendations** for targeting the specific sub-sectors or segments identified as potential targets.
- **Prepared the final report.**

### C. STRUCTURE OF THE REPORT

The interim report is divided into five chapters. Chapter II provides a brief profile of the District of Maple Ridge, Chapter III describes the technology sector in BC, and Chapter IV summarizes the results of our research to date regarding the opportunities to attract investment. Chapter V provides an overview of potential options and strategies for attracting investment. The major findings and conclusions of our research are summarized in the Executive Summary.

## II. OVERVIEW OF MAPLE RIDGE

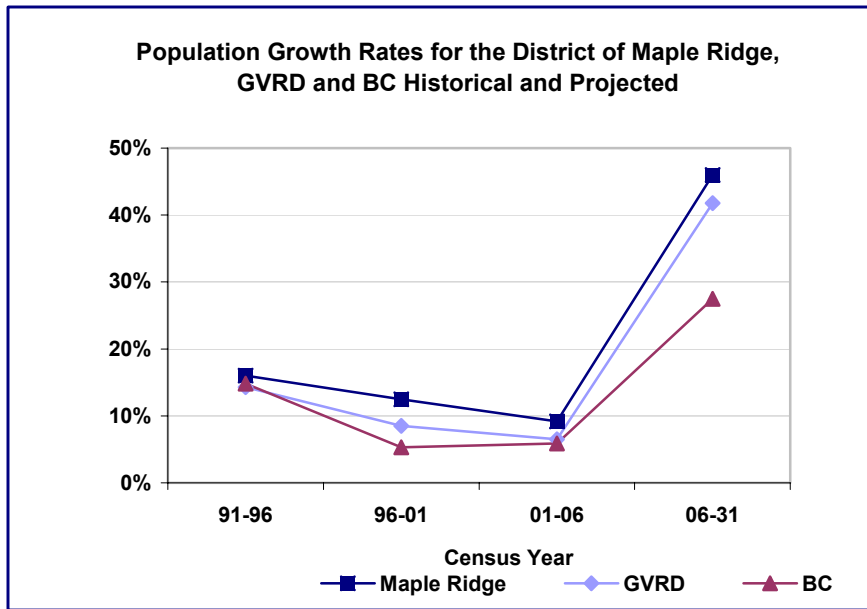
This chapter provides a brief overview of the District of Maple Ridge including location, competitive advantage, and industry standards.

### A. PROFILE OF MAPLE RIDGE

The District of Maple Ridge, which covers an area of 260 square kilometres, is situated on the north shore of the Fraser River, south of the coastal mountains, 45km east of the city of Vancouver and 40km from the US border. The community is bounded on the north by the Golden Ears Mountains and on the south by the Fraser River. The Stave and Pitt Rivers form the eastern and western boundaries. Maple Ridge is ideally located in the central Fraser Valley.

Over the past decade Maple Ridge has been one of the fastest growing municipalities within the Lower Mainland averaging approximately 3.7% growth, with a total population of about 75,000. Based on BC Stats projections, and assuming a conservative compound rate of growth of 1.67%, the population of Maple Ridge’s is projected to reach 93,700 by 2021 and 108,900 by 2031. Currently 65% of the workforce commutes outside of Maple Ridge on a daily basis.

The population in the District of Maple Ridge is projected by BC Stats to increase by about 46% between 2006 and 2031, the Greater Vancouver Regional District by approximately 42%, and BC by about 33%. Maple Ridge growth rates are believed to be underestimated based on the major transportation improvements slated for the coming year.



### B. COMPETITIVE ADVANTAGES

Maple Ridge benefits from a number of competitive advantages, especially when compared to other communities in the Fraser Valley. These competitive advantages include:

- **Infrastructure**

The District will benefit tremendously from over \$1 billion in investment in the transportation infrastructure over the next few years. With the building of the Golden Ears Bridge and the Pitt River Bridge, along with the twinning of Highway 7 and upgrades to bridge access points, Maple Ridge will enjoy unparalleled east-west and north-south transportation corridors. This will make it easier to move products to markets, and will attract investment that capitalizes on lower lease rates and housing prices. The Westcoast Express has had a significant impact on the area, leading to housing developments near the Fraser River. Maple Ridge is also served by a number of telecommunications providers.

▪ **Land**

Maple Ridge is characterized by its affordability and the availability of land, including residential, commercial and industrial. The District also offers competitive development costs compared to other areas of Metro Vancouver.

- **Residential** – housing prices in Maple Ridge continue to be among the lowest in the Metro Vancouver area. There are seven distinct historical neighbourhoods: Haney, Albion, Hammond, Yennadon, Ruskin, Whonnock and Webster’s Corners. Over 75% of Maple Ridge residents own their own home. Recently there has been a residential housing boom, much of which is in anticipation of the coming transportation improvements.
- **Commercial** – the supply of designated commercial lands total over 200 hectares, which meets current needs. In addition, there are 57 hectares of commercial land that is classed as underutilized or vacant. A recent review found that 56% of Maple Ridge’s commercial land was developed, 33% was underutilized and 11% was vacant.
- **Industrial** - There are five active business and industrial park sites, with 280 hectares in industrial reserve. To accommodate the long-term demand for industrial lands, it is estimated that Maple Ridge will need to create an additional industrial area or areas of about 80 to 120 hectares. The industrial space vacancy rate in the District average around 4.4% and net rental rates are on par with the Metro Vancouver average, but still well below that in Vancouver.

▪ **Quality of Lifestyle**

The District is one of the cleanest and safest communities in the Lower Mainland. Maple Ridge enjoys a number of natural amenities including parks, lakes and trails, as well as supporting a vibrant arts community and leisure activities. Highlights include:

- Scenic surroundings with miles of dikes, rivers, estuaries, marshland, and 213 hectares of municipal park land offer outdoor enthusiasts vast choices for walking, cycling, and hiking.
- Maple Ridge boasts one of the largest horse populations per capita in Western Canada and has a unique network of over 100 kilometres of equestrian trails that are protected under the Official Community Plan.
- Several golf courses within Maple Ridge or in close proximity offer a range of challenges.

- Recreation facilities include an award winning leisure center, family recreation centre, an active senior’s recreational centre, youth centre, lawn bowling, golf course, sports fields, three ice rinks and curling area.
- Sports fields and recreational facilities host children and adult team sports, that range from soccer to hockey; lacrosse to speed skating; and baseball to swimming, throughout the community. Multi-purpose sports fields include six baseball diamonds, two sand-based turf soccer pitches, two sand-based turf rugby-football fields, and two all-weather soccer fields. Two new artificial turf fields have since been added to the District’s inventory developed in cooperation with the local School District.
- A Leisure Centre that features three indoor pools waterslide, steam room, sauna, gymnasium and expanded fitness area, and boxing centre. Programs offered at the centre include swim lessons and events, aqua-fit classes, and hydro-fit.
- The arts community is supported and represented by the Maple Ridge Arts Council, Maple Ridge Art Gallery, Bandstand, Mountain Music Festival, Home Show, Caribbean Festival, and the Jazz and Blues Festival.

**C. LEADING ECONOMIC SECTORS**

Maple Ridge's industrial roots lie primarily in agriculture, fisheries, forestry and mining, and the primary industries reflect this history. While wood processing and agriculture are still major employers in Maple Ridge, the economy has been diversifying into the service sector and manufactured goods, including boat building, metal fabrication, film making, advanced technologies, call centres, battery manufacturing, and plastics. The following table provides a summary of some of the major sectors.

**PROFILE OF MAJOR SECTORS IN THE DISTRICT OF MAPLE RIDGE**

Sector	Labour Force	% of Total	Average Income	Number of Business Licenses
Retail and Commercial	13,420	40.2%	\$43,498	1,726
Manufacturing and Industrial	5,435	16.3%	\$49,178	144
Public Sector	7,590	22.7%	\$49,920	7 major employers
Tourism	2,695	8.1%	\$27,285	141
Agriculture	675	2.0%	\$28,795	18
Other	3,570	10.7%	-	-
Total	33,385	100%	\$39,735	2,029 est.

Source: *Community Profile*, District of Maple Ridge & BC Stats

The characteristics of the major sectors are summarized below:

▪ **Manufacturing**

The largest manufacturing industry is wood processing, accounting for more than one-third of the manufacturing work force. Maple Ridge grew its manufacturing base around the forest products sector, and maintains those ties to this day. In 2007, four of the five largest private sector employers are manufacturing wood products, primarily red cedar. Aging production facilities and the loss of primary capacity continue to be a concern but opportunities to create a

larger value-added wood manufacturing sector could stabilize this key source of well paying jobs and community income. Although wood products remain a force, the growth in manufacturing has been in other sectors in the last 20 years (mostly light industrial operations involved in machinery and equipment manufacture). The attractiveness of having major industry and manufacturing companies in Maple Ridge is in their ability to produce for export markets, thereby creating wealth in the form of high paying jobs and more than five per cent of the City's total tax revenues. Maple Ridge is a net creator of manufacturing jobs in Metro Vancouver as employment is greater than the resident manufacturing labour force.

- **Agricultural**

Maple Ridge has strong historical ties to agriculture and the sector retains a visible presence in the community. The District supports a variety of production including livestock, tree fruits, berries, vegetables, greenhouse products, nursery products and Christmas trees, mainly on small farms. Opportunities for future growth exist, primarily due to the abundant land and support for agriculture in the community. Average incomes are below the labour force average, but farm operations tend to provide a valuable seasonal and part-time source of work for owner-operators. There are opportunities in new food processing and specialty food products in conjunction with small farm operations. Specialty and ethnic product markets are growing and creating a new wave of small-scale processing. Direct farm marketing and agri-tourism are two other emerging growth areas in the District.

- **Tourism**

The District's tourism industry is oriented toward outdoor recreation and caters to day visitors from elsewhere in the Lower Mainland who take advantage of the surrounding mountains, lakes, rivers and trails, and particularly Golden Ears Provincial Park. While it is difficult to separate tourist spending from local spending, it is estimated that tourism contributed two percent of community income in 2001. The quality of the District's outdoor features, many of which are protected by park status, and increasing participation rates in outdoor activities suggest that there will be significant growth in the existing day-trip, close-in markets. Agri-tourism, First Nations', wildlife viewing, heritage, festivals, music and cultural events, all contribute to the tourism economy.

- **Retail and Commercial**

Growth in the retail sector is expected to accelerate in the future as traffic improves with the construction of the Golden Ears Bridge and Pitt River Bridge, the Town Centre Concept Plan evolves, the recommendations from the District's Commercial Land Use Study are implemented, and the general population increases. Over 40% of the Maple Ridge labour force is engaged in the service sector. Currently retail development serves a very local market, with District residents migrating to built-out shopping areas in Coquitlam where the malls and retail complexes are larger. Metro Vancouver has projected a 65 percent increase in retail space for Ridge-Meadows between 2007 and 2021, which will more than double the area's share of total regional space from three to seven percent.

- **Public Sector**

The public sector plays a key role in the economy of the District of Maple Ridge. Major public sector employers include School District No. 42, Ridge Meadows Hospital & Health Care Centre, Fraser Regional Correctional Centre, and the District of Maple Ridge. Public sector

workers account for 7,590 or 23.1% of the District's labour force.

#### ■ **Home-based Business**

Maple Ridge has a strong home-based business sector that supports 1,500 full-time jobs and consists of 47% of all businesses registered at the District. This sector includes construction contractors, maintenance companies, computer services, arts, baking, publishing, real estate, telephone soliciting, insurance and a host of other occupations.

#### ■ **Film**

The film industry has grown to over \$1 billion per year, and Maple Ridge has benefited from this growth. Maple Ridge is quickly becoming well-known as a "film friendly" community, and film companies have utilized businesses, homes and neighbourhoods in the District. A total of 62 productions were filmed in Maple Ridge in 2006 and 264 permits were issued for movies of the week, feature films and TV series.

## **D. EXISTING HIGH TECHNOLOGY SECTOR**

### **1. High Technology Industry Enablers**

The District of Maple Ridge benefits from having a supporting infrastructure that is attractive to the high tech industry. This includes:

- Availability of affordable office, industrial and residential space
- An unparalleled quality of lifestyle
- Excellent transportation infrastructure
- Geographic proximity to Vancouver and export markets of Asia and the United States
- The District of Maple Ridge commitment to bring high speed fibre into the downtown, District facilities and into industrial and commercial growth nodes and commercial access to this fibre
- A downtown promotion strategy that is currently being implemented
- A highly educated workforce
- Access to cable and high speed internet providers
- A 40,000 square foot high technology library
- A supporting base of high technology companies.

### **2. Historical Development of the High Technology Sector in Maple Ridge**

Maple Ridge has a base of technology companies that have developed in support of early, traditional industries. These industries, such as logging, lumber processing and agriculture, have been supported by smaller companies that provided technology solutions to production challenges. For example, a number of lumber machinery companies have developed to support the area's cedar production, offering machinery advances, solutions and expertise. This includes speciality manufacturers like Dia-Saw Manufacturing, Streifel Industries and others. Dia-Saw for example, has developed a number of specialized saws and support machinery for shake and shingle producers.

Similarly the District's agriculture and reforestation industry has developed technology or is supported by companies in the areas of life sciences, biotechnology, and silviculture. On the forestry research side, UBC's Malcolm Knapp Research Forest provides primary research and PRT Pelton provides technology and services for the silviculture industry.

With the emergence of the personal computer, and the growth of the internet in the last 15 years, a number of companies have developed to provide computer products, services and consulting, along with web services, such as web design and hosting.

**3. High Technology Companies in Maple Ridge**

Maple Ridge is home to a range of high technology companies engaged in supporting the local economy and in exporting. These companies provide technology solutions for primary industries, such as forestry, fishing and agriculture and for other technology companies located in the District. Almost one-half of the technology companies in Maple Ridge involve computer hardware/software or web based design and services. Following is a description of some of the District’s technology companies:

- E-One Moli Energy manufactures rechargeable lithium batteries in a variety of shapes and sizes in a 150,000 square foot facility in Maple Ridge. The facility is a fully integrated ISO 9001:2000 and ISO 14001 Quality Management System site. Moli Energy has about 400 employees and annual sales in excess of \$50 million.
- Insight Sound Stage operates a 40,000 square foot film, HD and television production studio. Through this facility, Insight has recreated the streets and palaces of 17th century Paris, a 747 crashing into the ocean and Santa’s Christmas day workshop. In 2007, the company had revenues of \$170 million, with 100 full time and 300 contracted employees.
- bala Systems specializes in high-end workstations, gaming systems, and server systems, mainly geared for gamers. The company specializes in providing high powered, customised products, as opposed to off the shelf solutions.
- Best Custom Computers provides computer products and services to clients in the Ridge Meadow area. While the company has off the shelf solutions, it also offers custom computers for customers with specialized requirements.
- Established in the summer of 2000, Cascadia Instrumentation carries a line of specialized technical equipment including gas detectors, data acquisition, speed switches, position monitors, regulators and transducers and flow meters. The company focuses on rugged instruments for severe service applications, and serves the Lower Mainland.
- FuelVapor Technologies has developed two prototype 3-wheeled cars with incredible performance. This includes reaching 92 miles per gallon and 0-60 in 5 seconds. The company has received coverage on Speed Channel, Discovery Channel, and Global TV and been featured internationally in magazines, news articles, websites and radio shows. FuelVapor is currently competing for the \$10 million Automotive X-PRIZE for the world’s fastest and most fuel efficient vehicle.

The following table provides an overview of some of the technology companies in Maple Ridge.

**HI TECH COMPANIES IN THE DISTRICT OF MAPLE RIDGE**

Company	Activity
Advanced CNC Machining	Precision metal parts
Afcorm Computer Services	Computer consulting and design

Company	Activity
Alex Pope Business Solutions	Custom software for business
Amza Media	Web design and construction
bala Systems	High end computer work stations for gaming
Best Custom Computers	Computer products and services
BGI Technologies	Broadband communications products
Cascadia Instrumentation	Instruments, gauges, flow meters, controls
Click.Net Web Design	Web design and construction
Cobranet Consulting	Web design and construction
Control Systems International	Remote secure communications
Digicom Webdesign	Web design and construction
E-One Moli Energy	Rechargeable lithium-ion batteries
Elpis Web and Graphics Solutions	Web and graphic designers
FuelVapor Technologies	Prototype 3-wheeled car
Gas Protection Systems	Energy and building conservation and management
Get Set! Communications	Web site design and internet communications
IK Media Group	Marketing, graphic design, event planning
Insight Sound Stage	Film, HD and television production studio
Integrity Testing Laboratory	Testing services
KnowlegeWare Communications	Safety management and training
Lucien Web Services	Web services
Most Home Real Estate Services	Online estate marketing and customer service
Multitrends	Internet provider
Nick Yeoman Web Design	Web designing and construction
Pure Ideas Plus	Web hosting and design
Simpower Sales	Power generation equipment
StableMotion Controls	Software and robotic systems
Surround Technologies	Custom made weather proof and acoustical enclosures
TVC Communications	Technical services and communications products

Company	Activity
WiseDot Technologies	Web developers

Source: *Community Profile*, District of Maple Ridge

### III. OVERVIEW OF HIGH TECH SECTOR

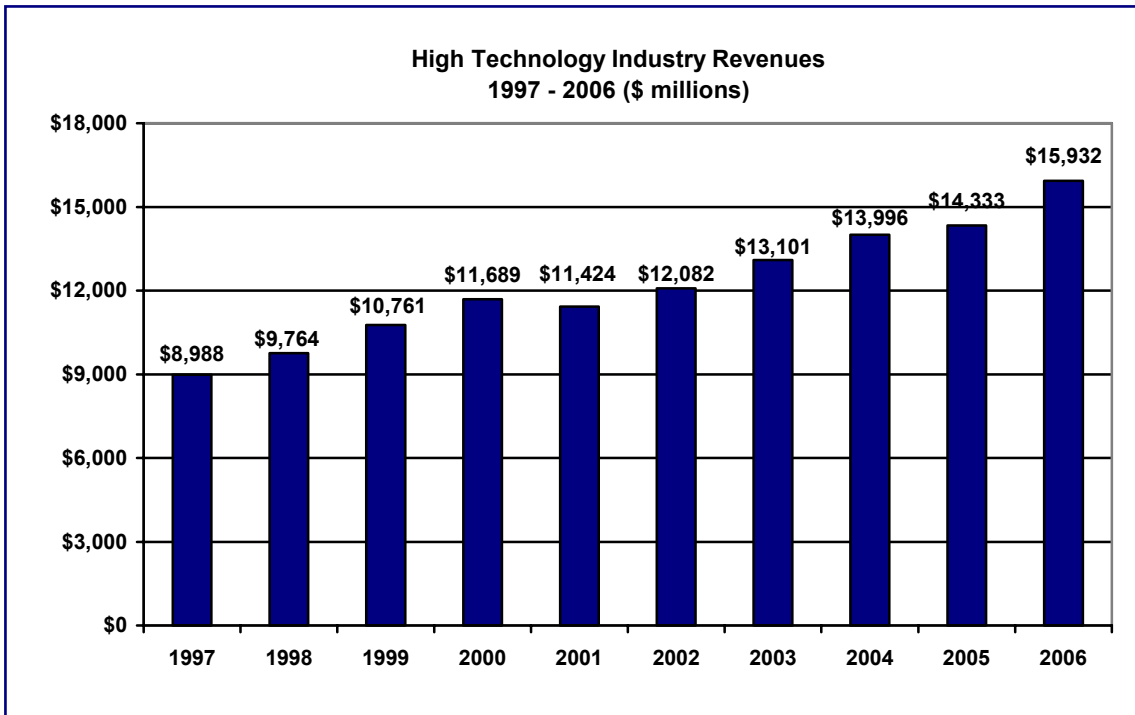
This chapter provides a brief overview of the high tech sector in BC including the characteristics of the high tech sector, high technology enablers in the District, a brief history of high tech, and the current state of high technology companies.

#### A. CHARACTERISTICS OF THE HIGH TECH SECTOR

The key characteristics of the British Columbian technology industry include:

- **The technology industry in British Columbia, which generated nearly \$16 billion in revenues and employed over 74,590 in 2006, is one of the fastest growing components of the provincial economy.**

The revenues of the high technology industry increased from \$8.9 billion in 1997 to \$15.9 billion in 2006, equal to an average annual increase of 6.2%.

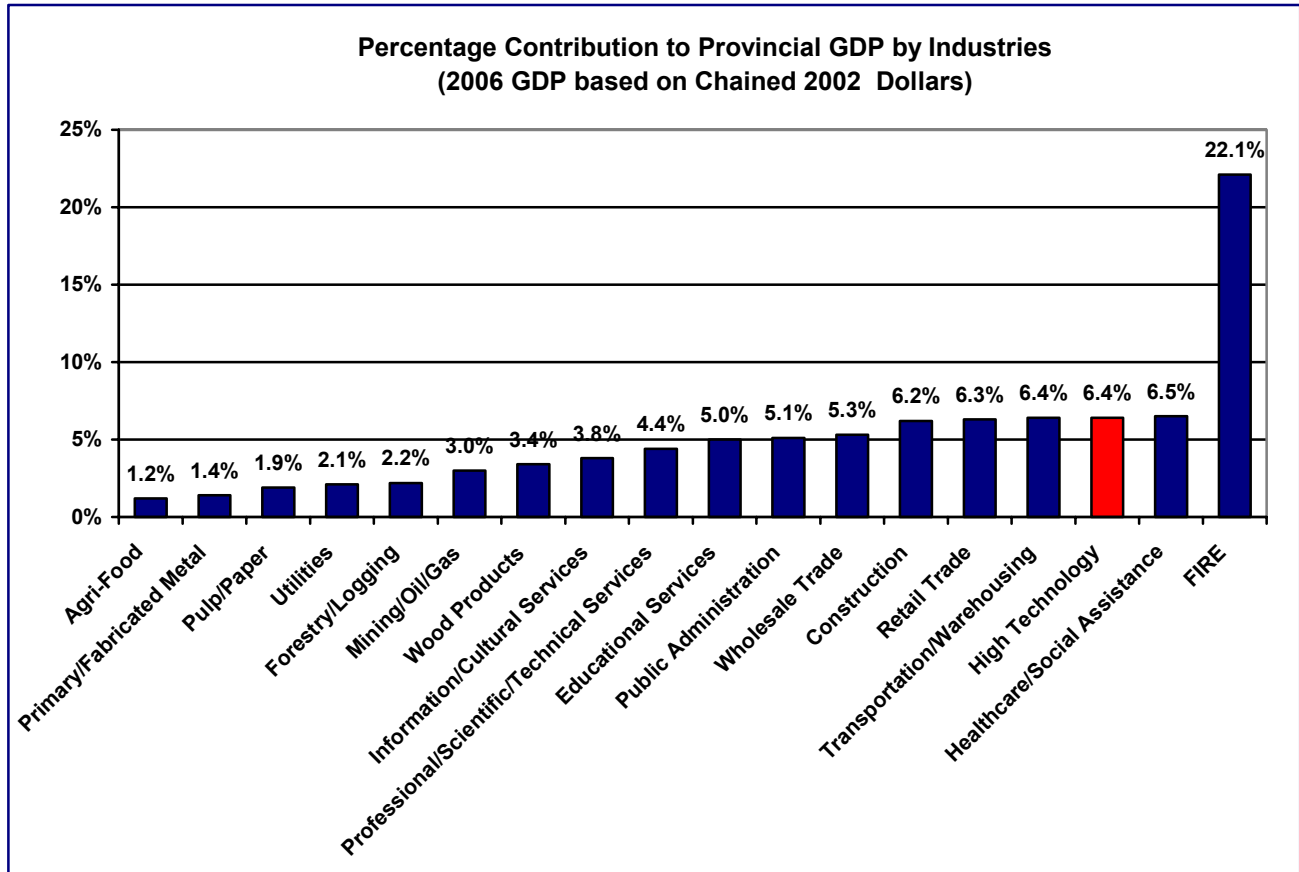


- **Positions in the technology industry pay significantly more than the provincial average.**

In 2006, workers in the high technology industry received annual weekly earnings of \$1,080, which is 35% higher than the provincial average of \$740. While the technology industry accounts for only about 4% of employment in British Columbia, it accounts for about 6% of earnings.

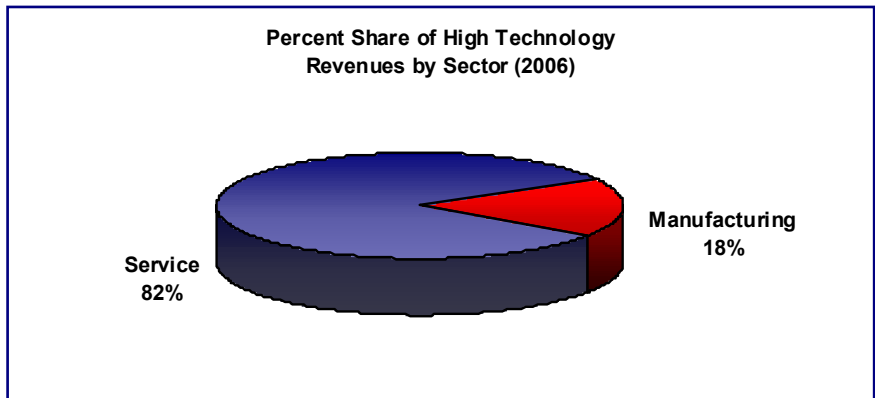
- The technology industry is already one of the largest economic industries in British Columbia.

On a chained dollar basis, the high technology industry accounted for 6.4% of provincial GDP in 2006, placing it ahead of most other industries including retail, wholesale, construction, wood products, forestry, and agriculture.



- Services accounted for 82% of technology industry revenues in 2006.

The balance between services and manufacturing has remained relatively steady as the industry has grown over the past ten years. Service revenues are generated from a wide variety of activities including software publishing, computer systems design, data processing and hosting, environmental consulting, engineering services, geophysical surveying and mapping services, testing laboratories, research and development in physical, engineering, and life sciences, Internet publishing and broadcasting,



motion picture and video production services, wired and wireless telecommunications carriers, satellite telecommunications providers, internet service providers. High technology manufacturing revenues are generated from the production of semiconductor and electronic components, audio and video equipment, aerospace products and parts, pharmaceutical and medicine products, medical equipment and supplies, navigational and guidance instruments, measuring, medical, and controlling devices, and other technology machinery and equipment.

- **The technology industry consists of a diverse range of existing sectors, emerging sectors, supporting platforms and enabling technologies.**

Reflecting the broad diversity of activities both within and across sectors, there are a wide variety of different ways to classify technology companies and sectors. We have defined the existing sectors within the technology industry as life sciences, digital media, power technology, and environmental technologies. Examples of emerging sectors include aerospace, oceans and security.

**SEGMENTS WITHIN THE BRITISH COLUMBIAN TECHNOLOGY INDUSTRY**

<b>Existing Sectors</b>	<b>Life Sciences</b>	<b>Digital Media</b>	<b>Power Technologies</b>	<b>Environmental Technologies</b>
<b>Emerging Sectors</b>	<b>Aerospace</b>	<b>Oceans</b>	<b>Security</b>	<b>Other</b>
<b>Platforms or Enabling Technologies</b>	<b>Information Technology</b>			
	<b>Wireless &amp; Wired Communication</b>			
	<b>Nanotechnology</b>			
	<b>Quantum Computing</b>			
	<b>Photonics</b>			

Enabling technologies and platforms such as Information and Communications Technologies (ICT) are fundamental technologies and frameworks that make it possible for other applications/technologies to work. Nanotechnology is an enabling technology for innovative new materials that will be used in a wide variety of fields. Similarly, photonics involves cutting-edge uses of lasers, optics, fiber-optics, and electro-optical devices in sectors such as manufacturing, health care, telecommunications, environmental monitoring, security, aerospace, and many others.

Estimates regarding the size of various industry segments are detailed in the following table in terms of the number of companies, employees, and revenues. The figures are estimates derived from a variety of sources; actual data is not available because the definitions commonly used for the sectors do not correspond directly to the NAICS codes used by Statistics Canada. The numbers add up to more than the size of the total technology industry because some companies are involved in more than one component of the industry. In addition, data of some segments (most notably aerospace) include sub-sectors that would not normally be classified as part of the technology industry. The table also identified some of the sub-sectors within each of the segments.

**B. LEADING ECONOMIC SECTORS**

The following table and series of bullets summarizes characteristics of the leading high tech economic sectors in British Columbia.

**ESTIMATED SIZE OF VARIOUS SEGMENTS IN THE BRITISH COLUMBIA HIGH TECHNOLOGY INDUSTRY**

Sector	Sub-sectors	Companies	Employees	\$ Revenues (billion)
<b>ICT</b>	<ul style="list-style-type: none"> <li>▪ ICT services</li> <li>▪ ICT manufacturing</li> <li>▪ Telecommunications services</li> </ul>	6,000	46,000	\$9.0
<b>Environmental Technologies</b>	<ul style="list-style-type: none"> <li>▪ Wastewater treatment</li> <li>▪ GIS for forestry and mining</li> <li>▪ Site remediation</li> <li>▪ Environmental instrumentation</li> </ul>	1,150	14,500	\$1.2
<b>New Media</b>	<ul style="list-style-type: none"> <li>▪ Games</li> <li>▪ Animation</li> <li>▪ Digital Film</li> <li>▪ E-learning</li> <li>▪ Web services</li> </ul>	1,000	15,000	\$2.0
<b>Aerospace</b>	<ul style="list-style-type: none"> <li>▪ Manufacturing</li> <li>▪ Maintenance, repair and overhaul</li> </ul>	400	10,000	\$1.2
<b>Power Technologies</b>	<ul style="list-style-type: none"> <li>▪ Alternative engine fuels</li> <li>▪ Biofuels, biomass and waste-to energy</li> <li>▪ Earth and geothermal energy</li> <li>▪ Fuel cell producers/others</li> <li>▪ Hydroelectric energy</li> <li>▪ Power electronics and smart energy</li> <li>▪ Solar, wind and ocean energy</li> </ul>	150	3,500	\$0.7
<b>Life Sciences/ Biotech</b>	<ul style="list-style-type: none"> <li>▪ Therapeutics and diagnostics</li> <li>▪ Pharmaceuticals</li> <li>▪ Medical devices</li> <li>▪ Agriculture, marine and forestry</li> <li>▪ Environmental</li> </ul>	91	2,173	\$0.8
<b>Marine Technology</b>	<ul style="list-style-type: none"> <li>▪ Marine robotics and subsea vehicles</li> <li>▪ Navigation, imaging and communication equipment</li> <li>▪ Marine acoustic and electronic instrumentation</li> <li>▪ Marine application programming and information systems</li> <li>▪ Related products and services</li> </ul>	300	1,750	\$0.2

Sources: British Columbia Technology Industries Association, New Media BC, Premier’s Technology Council, and Ference Weicker & Company

Following is a brief summary of each of these high tech areas.

- **Information and Communications Technologies**

As indicated in the previous table, Information and Communications Technologies accounts for the major of technology industry employment and revenues. The revenues of the ICT segment are generated primarily from the sale of services such as software and computer services (software publishers, computer systems design and data processing), telecommunications services, and cable and other program distribution. Other revenues are generated from the sale of computer equipment, communications equipment manufacturing (including wired and wireless), audio and video equipment, electronic components, and instruments manufactured in British Columbia.

- **Environmental Technologies**

Environmental technologies encompass goods and services that measure, prevent, limit or correct environmental damage to soil, air, water or to deal with problems of waste, noise reduction or eco-system protection. The environmental technologies sector is essentially an enabling industry, providing expertise, technologies and services to other sectors (mining, forestry, energy, manufacturing etc.). BC has a large environmental sector, encompassing approximately 1,000 firms and employing over 20,000 people. The estimated revenues of the sector totaled nearly \$2.0 billion in 2002 and have likely increased significantly since then. Most environmental firms undertake some form of applied research in-house. In addition, various universities and Federal Government facilities are involved in environmental related research.

- **The New Media Sector**

The new media sector includes the following three major sub-sectors: the development of digital content, delivery, and enabler. Digital content development encompasses game development, animation, web development/design, e-learning, visual effects/post-production/digital content publishing, streaming media and Internet marketing. Delivery involves providing the “pipelines” for digital content, including telecommunications, ISP (Internet Service Providers), and Web hosts. The enabling sub-sector provides the tools and resources for developing digital content, such as software development, Internet applications, digital compression technologies, security software, technology consulting or e-commerce applications.

- **Aerospace**

The aerospace sector consists of approximately 400 BC companies, which generate revenues of \$1.25 billion and employ over 10,000 people. Approximately two-thirds of the industry revenues are generated from maintenance & repair operations and one-third is generated from manufacturing activities. Currently, the BC industry ships 75% of its manufactured products to export markets, primarily in the US. The province benefits from its close proximity to large US aerospace clusters in Washington State, California, and Arizona as well as some cost advantages, strong infrastructure, and availability of skilled workers.

- **Power Technologies**

Power technologies (also known as energy technologies or smart energy) use advanced materials, digital technology and other innovations to improve the creation, delivery and use of power, making the whole energy system cleaner, greener and more efficient. Power

technologies merge alternative energy, power systems, and energy efficiency into smarter choices across the energy value chain. Alternative energy establishments are primarily engaged in the generation of electricity using means other than large-scale hydroelectric generator, fossil fuel and nuclear power. Examples of alternate means include wind power, solar power, wave/tidal power, small-scale hydroelectric generator, biomass/biofuel/biogas, geothermal heat and fuel cell.

- **Advanced Manufacturing**

BC is home to numerous advanced manufacturing companies from plastics to marine technology. For example, there are approximately 225 companies in BC that process synthetic resins into plastic products, approximately 13,000 people employed in engineered wood products manufacturing in over 156 facilities, about 220 wireless companies in BC are generating over \$1 billion in revenues, and nearly 300 companies generating revenues in excess of \$250 million and employing 1,750 people in the marine technology industry.

- **Life Sciences Health and Medical Devices**

The life sciences sector in British Columbia encompasses organizations involved in the pharmaceutical, biopharmaceutical, agricultural, marine, and forestry biotechnology, bioinformatics, bioproducts, therapeutics and diagnostics, and medical devices sub-sectors. British Columbia is the fastest growing biotech centre in Canada and the 7th largest cluster in North America when ranked by the number of biotechnology companies (ahead of British Columbia with the most companies is California followed by Massachusetts then Ontario, Quebec, North Carolina, and Maryland). The Biopartnering North America (BPNA) Conference, which attracts international investors and partners, has helped to raise the profile of the cluster internationally. There are 160 companies in the medical device industry in BC. Most medical devices are sold directly to hospitals and extended care/long-term care institutions or to distributors in Canada and the US. BC has an emerging medical device sub-sector (particularly in areas such as drug-device combinations) built on our research infrastructure and manufacturing costs which are lower than in certain US centres.

- **Agriculture Life Sciences**

A number of BC companies are active in the development of life science applications in agriculture developing industrial proteins, functional foods, feedstocks, oils and nutraceuticals. Agriculture life sciences is supported by a number of public and private research organizations, numerous university departments, and seven separate chairs at different universities in BC. Life sciences can help reduce costs, increase new revenues, increase crop yields, reduce chemical use, and improve health benefits of food.

- **Bio-Energy**

British Columbia already produces approximately half of the wood-based energy in Canada. Most of this production occurs through self-generation within the forest industry, primarily in pulp and paper mills and to a lesser degree in sawmills using waste wood from their regular processing operations. The forestry sector self-generates about 4000 GWh wood-fired electricity and 1300 GWh on contract to BC Hydro. The energy provides both heat and electricity, freeing up energy that would otherwise need to be supplied by BC Hydro or Terasen. As energy prices rise, many forest companies have moved to expand capacity to produce energy from wood waste. Feed stocks and type of bio-energy include bio diesel, ethanol, co-generation, wood pellets, gasification and municipal waste.

## C. BENEFITS OF DEVELOPING THE TECHNOLOGY INDUSTRY

Further developing the technology industry will generate major benefits including:

- **Growth in the technology sectors will generate direct economic impacts** in the form of new business start-ups, business development and expansion, new capital investment, and increased employment, profits, and taxes. It will generate quality, high paying jobs.
- **The technology developed and commercialized in the technology sectors will be applied in other economic sectors in British Columbia.** To remain competitive, our economic sectors must innovate more rapidly than ever before due to globalization, stronger competition, the growing impact of information and communications technology, and the high pace of scientific and technological change. Knowledge is now the key source of competitive advantage. Innovation is particularly important for British Columbia as we seek to shift from a resource-based economy to a more knowledge-based economy. Our future standard of living will be determined, in large part, through our ability to improve productivity, add value, and differentiate our products and services through technology.
- **The technology and knowledge developed will be applied in the public sector,** helping to improve service quality and productivity in key fields such as health and education.
- **Growth in the technology sectors will help to enhance the sustainability of our economy and our way of life.** For example, growth in our power technology sector will help to change how we use energy, contributing to smarter power (e.g. biofuels and renewable generation), smarter distribution (e.g. grid management, combined heat and power generation, and cogeneration) and smarter end uses (e.g. transportation, green buildings, and distributed generation).
- **Growth in the technology sectors will, in turn, support increased research activity,** which itself generates direct economic impacts (expenditures and employment). In addition, research activity attracts and supports world-class researchers, contributes to a more highly educated and skilled population, fosters linkages between key stakeholders, and develops the knowledge base.

Over time, development of the technology industry will contribute to a strong and vibrant economy, an educated and skilled population, a supportive social infrastructure, and healthy communities.

## D. BRITISH COLUMBIA IS WELL-POSITIONED TO GROW

The technology industry in British Columbia is well-positioned to grow in the coming years given our strong capabilities, the rapid market growth projected in most industry sectors and our key competitive strengths.

### 1. Strong Capabilities

The British Columbian technology industry has developed strong capabilities across a wide range of key areas including wireless, satellite, microwave and IP network technologies (enterprise class solutions, wireless devices, enabling software and component producers); electronic games; e-learning; digital animation; special effects and post-production; enterprise resource management, customer relationship management, supply chain management and financial management software; embedded software; integrated circuit design; computer-integrated manufacturing systems; robotics and controls;

digital imaging and printing technologies; surveillance and monitoring systems; navigation and air traffic management systems; electronics manufacturing services; fuel cell systems and components; power electronics; natural gas and electric hybrid engines; smart grid and power measurement; micro-hydro, ocean, solar, and wind energy; sustainable urban building and design practices; aerospace and automotive components; sub-sea vehicles and human health care products. British Columbia is the fastest growing biotech centre in Canada and the 7th largest cluster in North America.

We are home to internationally-recognized innovative companies such as Electronic Arts, the world's largest publisher of electronic games; PMC Sierra, a NASDAQ 100 supplier of networking components and software; Ballard Power Systems, the world's largest developer of fuel cell technology; and Sierra Wireless, a global leader in wireless technology. The presence of several prominent high technology sectors at different stages of market development bodes well for British Columbia as it provides both short-term opportunity and long-term sustainability given the right mix of policies and support.

## **2. Growing Markets**

The international markets for most of the technology sectors are large and growing rapidly as illustrated below:

- ICT spending worldwide is forecast to increase from US\$ 3.1 trillion in 2006 to \$US 3.9 trillion in 2009. Of the total market, communications equipment/services accounted for about 51 percent of revenues, ICT services accounted for nearly 23 percent, and hardware and software accounted for nearly 17 percent and 10 percent of the market, respectively. Software is projected to post the fastest growth at 10.6 percent on a compound annual basis over the next four years. ICT services, hardware and communications equipment/services are projected to grow by 9.4 percent, 8.4 percent and 5.2 percent respectively over the next four years on a compound annual basis.
- Current estimates of the global market for environmental goods and services vary from US\$ 500 billion to over US\$ 800 billion per annum and are projected to reach US\$ 1 trillion by 2010. It has been estimated that the global environmental business market is growing at the rate of 45 percent annually in developed country markets and at over 10 percent in selected developing economies.
- The market for next-generation energy solutions represents billions in potential revenue - even niches are worth hundreds of millions. By various estimates, the energy technology sector (not including sales from power production itself) has a total market size today of US\$ 170 billion. Experts project that the global market for clean energy products and services will exceed US\$ 3.5 trillion from 2000 to 2020. Of that, sales of power systems and clean energy production technologies are projected to exceed US\$ 500 billion over this time period. Much of the remaining market will be in energy efficiency products and services.
- The global biotechnology sector currently generates some US\$ 40 billion in sales and is expected to grow to a US\$ 120 billion market in the next decade.
- The global entertainment and media industry is forecast to grow at the rate of 6.6 percent annually, reaching US\$ 1.8 trillion in 2010. One of the two fastest-growing segments in the global entertainment and media industry is video games. Overall, the video game market will expand at an 11.4 percent compound annual growth rate to US\$ 46 billion in 2010 from US\$ 27 billion in 2005. By 2008, Internet and wireless will be major distribution channels for entertainment and media content, spurred by broadband penetration and new mobile phones that will be used as much for entertainment as for communication. Global spending via online

and wireless channels reached US\$ 19 billion in 2005 and is projected to increase to US\$ 67 billion by 2010.

### **3. Competitive Strengths Upon Which to Build**

The technology industry in British Columbia has a strong foundation on which to build our future growth. Some of the key strengths which will drive further development of the technology industry include:

- **British Columbia features a well-developed research and development infrastructure.**

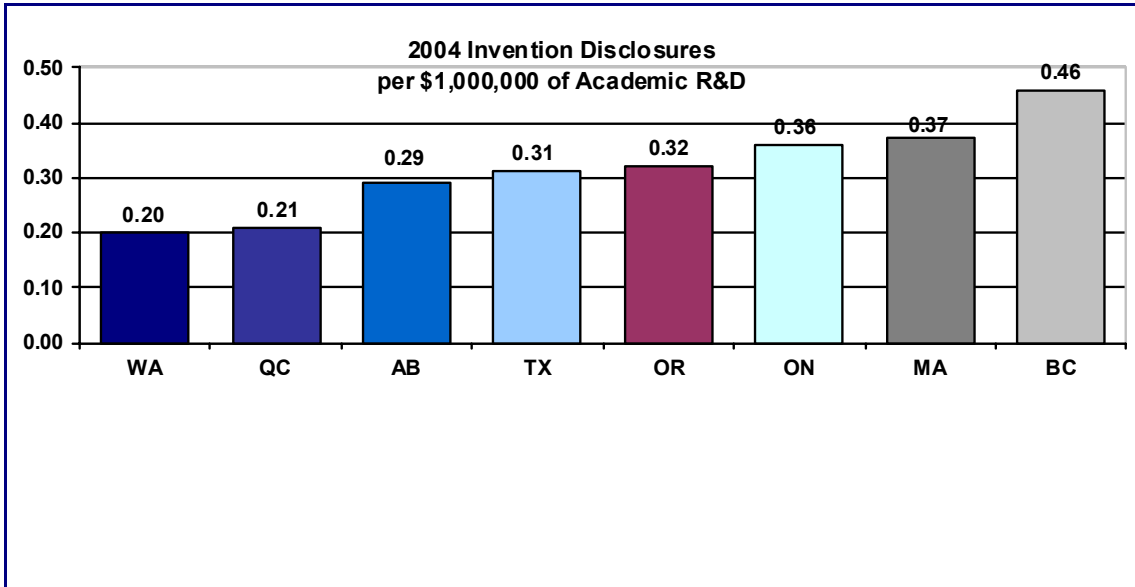
Over \$2 billion was invested in research and development in British Columbia in 2004 (the latest year for which data has been published by Statistics Canada), of which 57% was performed by industry, 36% by higher educational institutions, 4% by the Federal Government, and 1% by the Provincial Government. The leading sources of funding for R&D in British Columbia were industry (accounting for 41% of the funding in 2004), higher education (15%), the Federal Government (19%), foreign sources (17%), and the Provincial Government (3%). Research and development expenditures by the Federal Government and the Provincial Government have increased substantially in British Columbia since 2000.

Over 100 science and technology related research facilities are located in British Columbia, the majority of which are located on the campuses of the various universities in British Columbia. Recent investments made through programs such as the British Columbia Knowledge Development Fund and the Canadian Foundation for Innovation have strengthened the infrastructure and better enabled the province to compete for research funding. Eight British Columbia universities and university-colleges participate in 20 of the 21 Networks of Centres of Excellence (NCE) in Canada, taking the lead in two of the Centres. Other key research facilities include Institute for Fuel Cell Innovation, Pacific Biological Research Station and Summerland Research Station.

Some of the key federal government programs that fund R&D in British Columbia include NSERC, CIHR, TPC, Industrial Research Assistance Program - IRAP, and Western Economic Diversification – WD. Key funding initiatives of the Provincial Government include the Leading Edge Endowment Fund, the British Columbia Knowledge Development Fund, Genome BC, the Michael Smith Foundation for Health Research, and the Forest Science Program.

- **The higher education institutions in British Columbia have a strong track record in developing and performing basic research, publishing the results, and spinning off companies and technologies.**

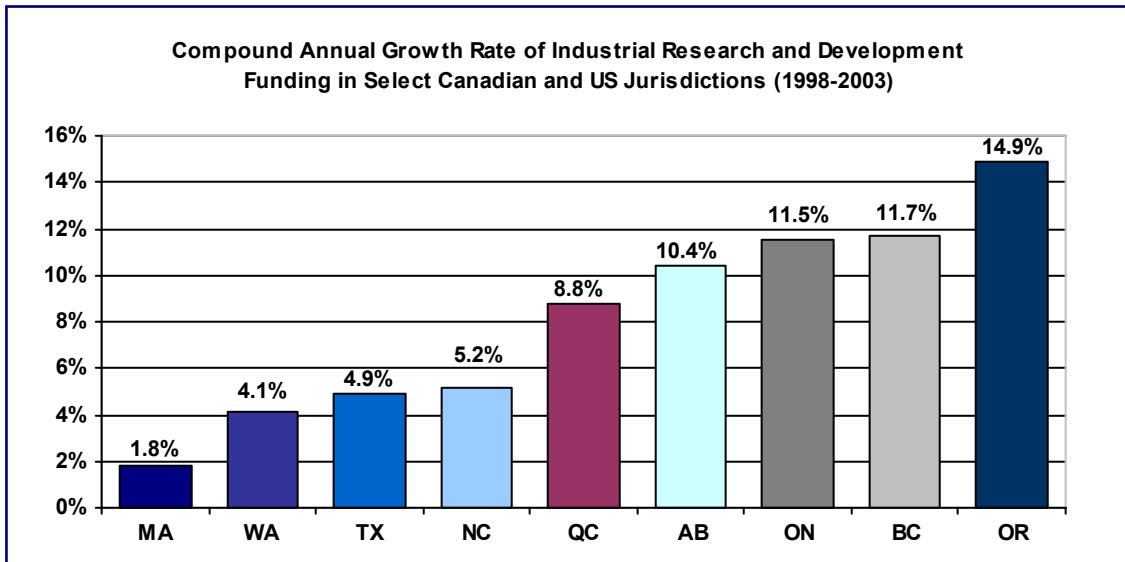
University Industry Liaison Offices (UILOs) have been established at University of British Columbia (UBC), Simon Fraser University (SFU), University of Victoria (UVic), and University of Northern British Columbia (UNBC). Three British Columbia universities - UBC, SFU and UVic - generated 45 license/option agreements, 21 US patents, 8 start-up companies, and \$16.3 million in license income in 2006. Amongst universities across Canada, UBC ranked 1st in invention disclosures, 1st in new US patent applications and 2nd in patents received, 3rd in new licenses and options executed, and 2nd in gross license income received in 2006. A report published in 2006 by the Milken Institute ranked UBC 8th in North America, and number one in Canada for its technology transfer and commercialization activities. As of March 2007, UBC had spun-off 125 companies while SFU had spun-off 72 companies.



Note: NC had 568 invention disclosures in 2004, academic R&D data for NC is not available. US data have been converted to CAD\$ at the rate of 1 US\$ = 1.14 CAD\$

- British Columbia is a very attractive location for companies to perform research and development.

The innovation support system is supported by tax incentives that make the after-tax costs of industrial R&D in British Columbia nearly the lowest in Canada. Approximately 1,400 companies in British Columbia claim the SR&ED annually. British Columbia ranked sixteenth in terms of average annual growth in industry research and development funding between 1998 and 2003 among the 10 Canadian provinces and 50 US states. The rate of industrial research and development funding growth in British Columbia from 1998 to 2003 exceeded every comparison province or state (Alberta, Ontario, Quebec, Washington State, North Carolina, Texas and Massachusetts) in our study with the exception of Oregon.



Note: US industry funding of R&D expenditures includes all nonfederal sources; WA data for 1998 includes federal sources as well

- **The attractiveness of British Columbia as a place to invest has increased markedly in the past few years.**

British Columbia features a strengthening economy, low personal, corporate, and small business tax rates, a well-developed physical infrastructure with access to key markets, reliable and inexpensive electric power, and a high quality of life.

- **British Columbia has a well-educated population and strong post-secondary education system.**

Over one-half of British Columbians aged 18 to 29 years have participated in post-secondary education. The percentage of the population in British Columbia, aged 25 to 54 years, with a university degree is higher than in the Prairie Provinces or Quebec. Moreover, the percentage of the population with a college or university education in Canada is the highest amongst the G7 countries.

There are over 1900 programs offered at 26 British Columbia public post-secondary institutions including 6 universities, 3 university colleges, 12 colleges, and 5 institutes. The five public universities served 152,229 full-time equivalent students and awarded 20,338 degrees, diplomas, and licentiates in 2004-2005. Of these students, 28,762 were enrolled in Master's degree programs and 22,878 were enrolled in doctorate degree programs; 3,883 Master's degrees and 497 Doctorate degrees were conferred in 2004-05.

In 2004-05, approximately 4,551 British Columbians graduated from UBC, SFU, UVic, UNBC, and Royal Roads University with a Bachelor's degree in various science disciplines (including applied sciences and health sciences), 927 obtained a Master's degree in these fields, and 272 obtained a Doctorate degree.

Recognizing the importance of post-secondary education, the Provincial Government has committed to creating 25,000 new student spaces between 2004 and 2010, and allocated almost \$800 million in capital funding for three years starting from 2006-07 to accommodate growth. In 2005-06, 4,200 new spaces were created including 825 new seats for computer science and electrical and computer engineering programs and 96 medical school spaces.

- **A variety of organizations encourage the development of the technology industry and provide support services to technology companies across British Columbia.**

As an illustration:

- 29 industrial technology advisors funded by the National Research Council (NRC) support business through every aspect of the innovation process by matching clients with expertise, information and resources. NRC also operates the Canadian Technology Network, which provides access to a wide range of technology and related business assistance through connections to government labs and agencies, universities, colleges, industry associations, regional technology councils, and technology transfer centres.
- The BC Regional Science and Technology Network (BCRSTN) consists of nine innovation councils and technology transfer centres throughout rural British Columbia. The BCRSTN members foster business and community growth through the application of science, technology, and innovation.

- The mandate of the BC Innovation Council is to accelerate technology-based economic development, with a particular focus on accelerating commercialization programs for early-stage and rapid growth companies, expanding technology transfer, partnering in the development and promotion of a province-wide strategy for science, innovation, and technology development, and building public awareness for science and technology.
- Provincial Government funded agencies such as the Investment Agriculture Foundation and Forest Innovation Investment play a role in facilitating technology transfer and encouraging applied research.
- The Premier's Technology Council (PTC) was created in 2001 to provide advice to the Premier on technology-related issues. The mission of the Council is to help make British Columbia one of the world's top ten technology centres.
- Discovery Parks Incorporated operates multi-tenant facilities that provide about 400,000 square feet of space on campus and about 175,000 square feet of space off campus for technology companies.

In addition, a variety of industry associations and other groups work to promote development of various sectors within the technology industry.

- **Programs such as the Equity Capital Program and labour sponsored venture capital funds are helping to increase access to capital in British Columbia.**

The amount of venture capital invested in British Columbia companies tends to vary widely from year to year. In 2005, while the value of venture capital placed in Canada increased from \$1.76 billion to \$1.83 billion, the value placed in British Columbia decreased from \$247 million to \$226 million. In 2008, the forecast was for \$238 million in investment with a target of \$248 million for 2009 and \$260 million for 2010.

The Government of British Columbia's Equity Capital Program (ECP) encourages investment in British Columbia businesses by providing British Columbia investors with a 30 percent refundable tax credit. The allowable maximum tax credit budget for ECP and related programs under the Small Business Venture Capital Act (SBVCA) is currently \$25 million per year which allows up to \$83 million to be raised and tax-credited. The Working Opportunity Fund (WOF) invests equity capital in small to medium sized businesses in British Columbia's emerging industries. During its thirteen-year history, WOF has invested over \$370 million in 95 British Columbia companies. In the first half of 2006, WOF has made investments totaling \$10.4 million in five new portfolio companies and \$15.4 million in twelve existing portfolio companies. British Columbia Medical Innovations Fund (BCMIF) is another employee venture capital corporation fund that focuses exclusively on investing in British Columbia's fast growing life sciences sector. Since 2004, BCMIF has invested \$2.5 million in four British Columbia companies. The Business Development Bank of Canada (BDC) is a leading source of venture capital and debt financing for businesses in British Columbia. The BDC authorized loans of \$66 million in British Columbia in the fiscal year ending on March 2006 (increasing the portfolio to \$768 million from \$702 million).

Angel investments are the leading source of capital for technology companies. Since 1999, the Vancouver based Angel Forum has held 18 Angel Forums in Vancouver resulting in over \$20 million being raised for emerging companies. Across Canada, angel investors are estimated to

invest over \$3 billion in Canadian small business each year (in comparison, the value of venture capital invested in Canada each year is roughly around \$1.8 billion).

- **Extensive consultation overtaken during the past few years have helped to strengthen linkages within the industry and obtain agreement on the key issues to be addressed.**

Extensive consultation has been undertaken over the past few years towards the preparation of industry development strategies and a regional technology strategy for British Columbia. As part of the Integrated Technology Initiative, over 400 representatives of the technology and business community participated in a series of town halls to provide feedback and recommendations on the key issues facing the sectors as well potential actions to address these issues. In preparing the PIC Report, which outlines a technology development strategy for regional British Columbia, we conducted in-depth interviews with nearly 400 representatives of the business, technology, and regional economic development communities in addition to a series of workshops and focus groups in ten regional centres. Individual sectors have also consulted with key stakeholders in the development of various strategies.

## IV. THE OPPORTUNITIES TO ATTRACT INVESTMENT

This chapter first uses secondary sources to provide an overview of the investment decision in terms of common corporate objectives for making new investments, the decision-making process that companies go through, and the site selection criteria and key information sources that they employ. We then provide an overview of the major functions commonly undertaken by investment promotion agencies to influence the site selection decisions.

### A. OVERVIEW OF THE INVESTMENT DECISION

#### 1. Most Companies Plan to Make New Investments

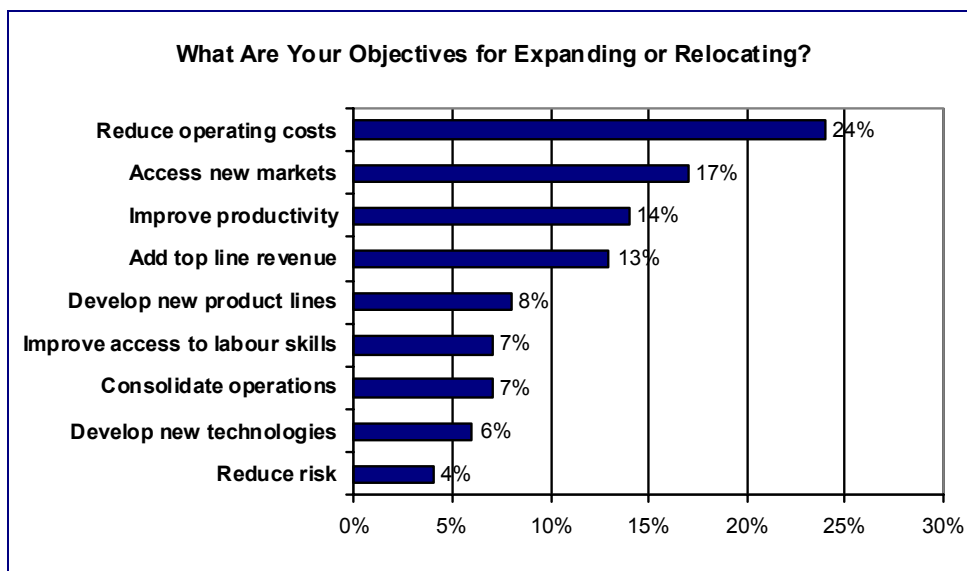
Most companies are planning to make new investments over the next three to five years. For example, an extensive survey of manufacturers in the US commissioned by the National Association of Manufacturers found that nearly 65% of the companies are planning to expand over the next three years<sup>1</sup>.

#### 2. Most Investments are Made in Close Proximity to Existing Operations

Not all companies that are looking to make new investments are feasible targets for the District of Maple Ridge. Research indicates that most companies will either make their new investment directly in their existing location or within close proximity to their existing community. In most instances, companies have deep connections to their existing markets, work force, key suppliers and communities and are not willing to consider venturing far from their existing locations.

#### 3. New Investments are Made for a Variety of Different Reasons

Companies plan to establish new facilities for a variety of different reasons including a desire to reduce operating costs, access new markets, improve productivity, add top line revenue, develop new product lines, consolidate operations, improve access to labour and skills, develop new technologies and reduce risk.



<sup>1</sup> National Association of Manufacturers, 2005 Manufacturing Location Survey, 2005.

Understanding the objective of a specific company’s proposed investment is important because it will provide insights into the relative competitive position of Maple Ridge. For example, companies that focus on reducing costs or improving productivity tend to either locate within close proximity to their existing operations (so that they continue to access the same raw materials, use their existing labour force and serve their existing markets from a new, more capital intensive facility) or move to low cost jurisdictions (where they may develop new sources of supply and a new labour force while serving their existing markets). For Maple Ridge to be considered, such companies commonly must be already located here or in a neighbouring jurisdiction. On the other hand, companies that are looking to develop new markets can be drawn from farther away to the extent that they will be able to better access those new markets.

**4. Companies Can Invest in a Range of Different Types of Facilities**

The objectives and nature of the investment decision also vary depending upon the type of facility that will be developed. Back office facilities and call centres, for example, do not need to be located close to markets or existing sources of supply and therefore are readily able to move, can be located in a wide variety of regions and are often moved with the objective of reducing costs or improving productivity. On the other hand, proximity to markets and key inputs (including labour) is the primary criterion applied in the selection of sites for manufacturing operations.

According to the survey of 220 leading manufacturers by the National Association of Manufacturers, the most common types of facilities developed by manufacturers include manufacturing and production plants (38%), distribution centres (16%), headquarters (14%), regional sales offices or service centres (13%), back office facilities (13%), and others (6%). According to a survey of site selection consultants by Area Development Magazine, the most common types of facilities with which the consultants have been involved include manufacturing plants (30%), warehouses and distribution centres (29%), back office facilities and call centres (15%), headquarters (14%), research and development facilities (8%), and other facilities (4%)<sup>2</sup>.

**5. The Investment Decision Process Commonly Consists of Four Phases**

Although the actual investment process can vary significantly from case to case, the decision-making process associated with the development of new facilities commonly consists of four phases including:

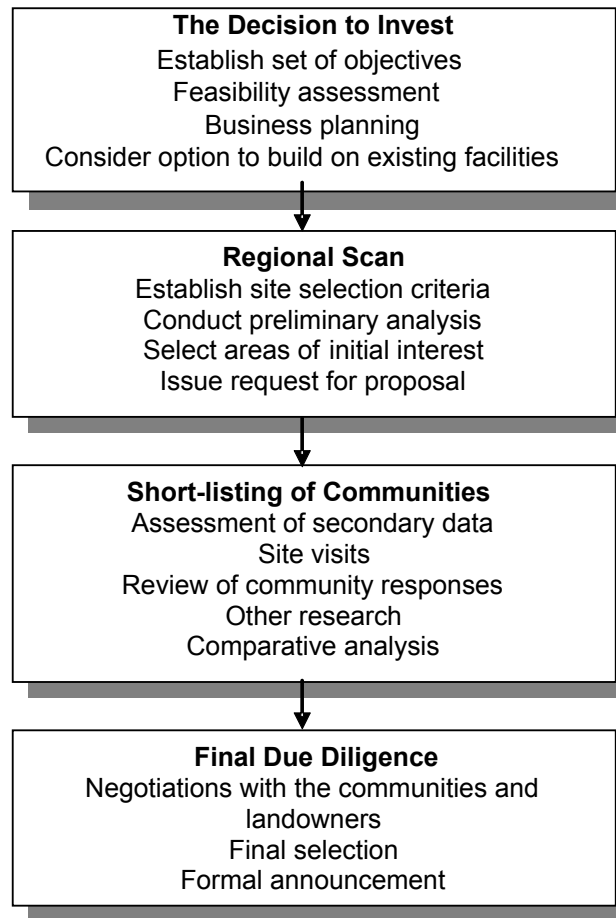
- **The Decision to Invest.** The first step is for the company to decide to make a new investment, after establishing a set of objectives and assessing the feasibility. As part of this initial decision, the company may decide to simply expand its operations which would end the site selection process.
- **Regional Scan.** For companies that are considering a new location, the next step may be to conduct a regional scan to identify potential locations for its operations. The company may establish site selection criteria, conduct a preliminary analysis of potential areas, select some areas of initial interest, assess the investment climate in each target area, and perhaps issue a request for proposal to candidate regions or communities.
- **Short-listing of Communities.** Based on the results of the regional scan, a short list of communities may be developed and refined based on responses provided by communities, site visits, other research and comparative analysis.
- **Final Selection.** After assessing the short-listed communities, the company will make its final

<sup>2</sup> Area Development Magazine, Annual Consultant Survey, 2007.

selection. The final phase may involve final due diligence, negotiations with the communities and landowners, the final selection, and formal announcement.

An overview of the four phases is provided below.

**The Four Phases of Site Selection**



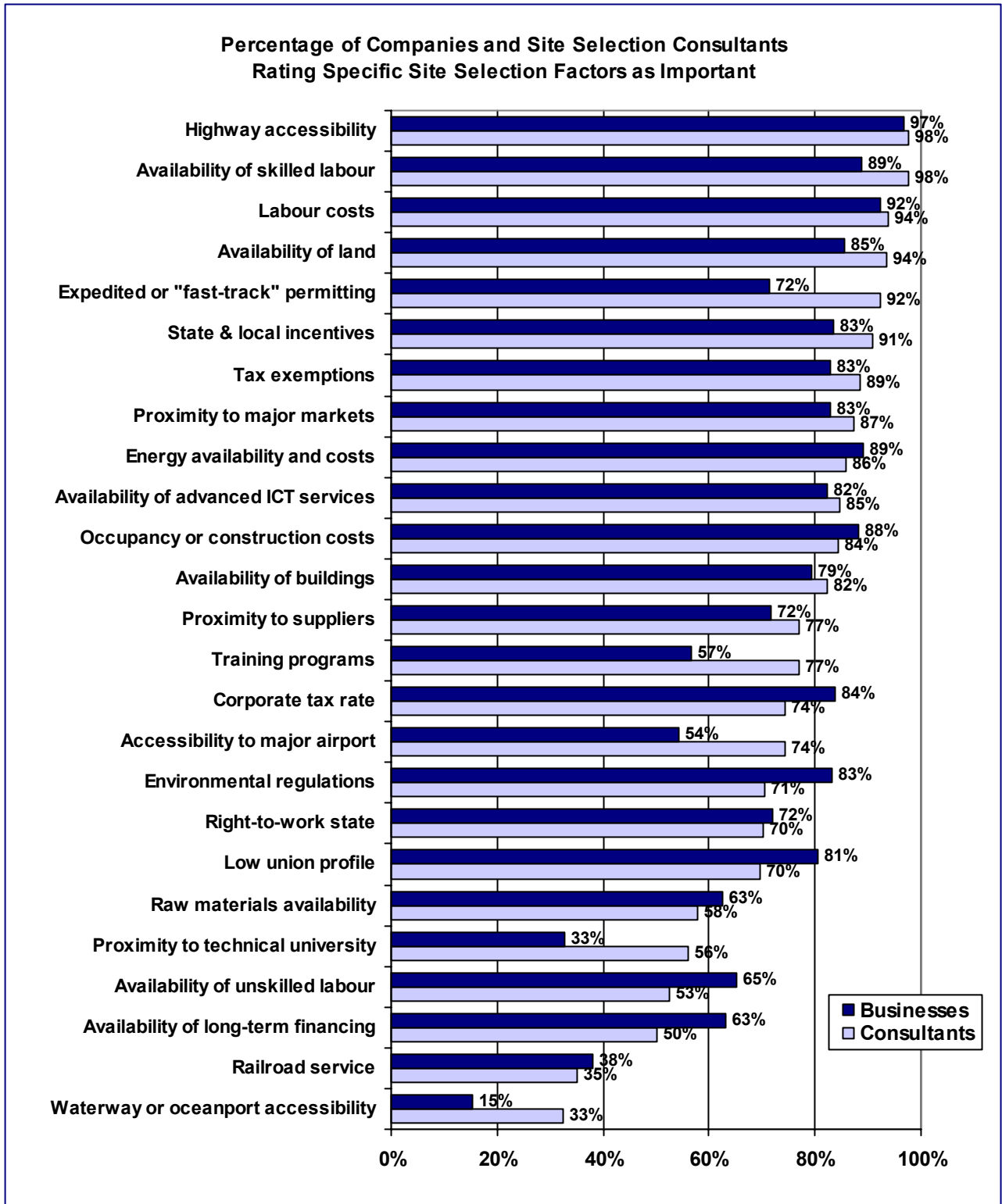
The structure of the investment decision process varies significantly from company to company. For some companies, the process is highly structured involving a series of formal reviews. For other companies, the process may be very informal.

**6. The Key Site Selection Criteria Vary from Situation to Situation**

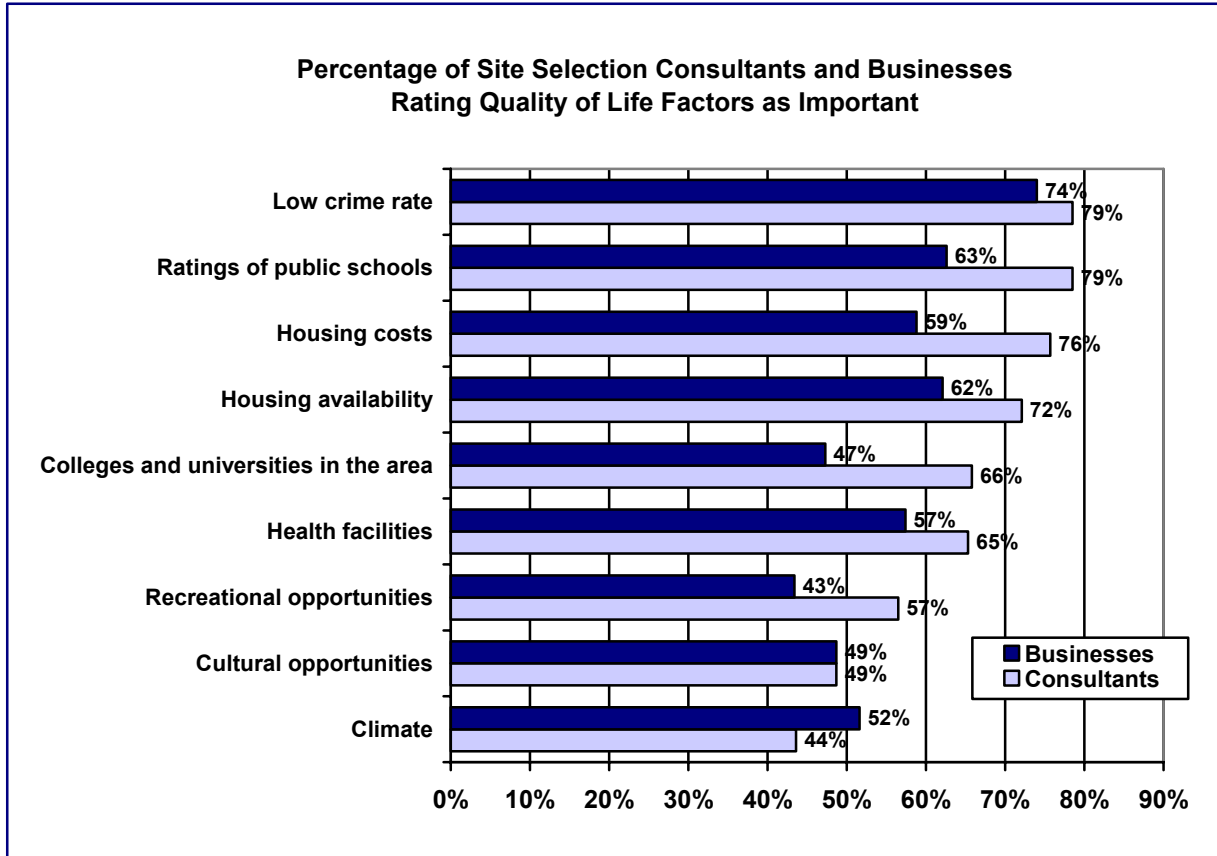
The site selection criteria used by companies will vary from situation to situation, depending upon the objectives of the investment, the types of the facilities to be developed, and the characteristics of the company and the economic sector.

Area Development Magazine conducts an annual survey of company and site selector representatives involved in location decisions to determine the key site selection factors. Across all sectors and facilities, the site selection criteria that are most commonly identified as important by the companies include highway accessibility, labour costs, energy availability and costs, availability of skilled labor, occupancy or construction costs, and availability of land. The criteria that are most commonly identified as important by the site selection consultants include highway accessibility, availability of skilled labour,

labour costs, availability of land, expedited or “fast-track” permitting, and state and local incentives. The results of the 2007 survey are summarized in the chart below.



The Area Development survey also asks the company and site selection representatives to comment on the relative importance of various quality of life factors. As indicated below, the quality of life factors that were most commonly identified in the 2007 survey by businesses include low crime rates, ratings of public schools, housing costs, housing availability and colleges and universities in the area.



Our past research indicates that site selection criteria (such as those highlighted in the Area Development Magazine surveys) function more to eliminate potential sites rather than to select locations. For example, while highway accessibility or telecommunications infrastructure are fundamental prerequisites for a site to be considered, they are not typically the final factor why one short-listed location is eventually selected over another.

**7. Companies and Site Selectors Utilize a Variety of Information Sources**

Companies use a variety of information sources to find out about the business climate of a particular region. Every three years, Developer Counsellors International conducts a survey of senior level executives from companies with over \$100 million in annual revenues and leading site selection consultants that work with medium and large sized companies. According to the 2008 survey of 281 representatives, the most common ways in which decision-makers become more aware of the business climate of a particular region is through dialogue with industry peers, articles in newspapers and magazines, business travel, and meetings with economic development organizations<sup>3</sup>.

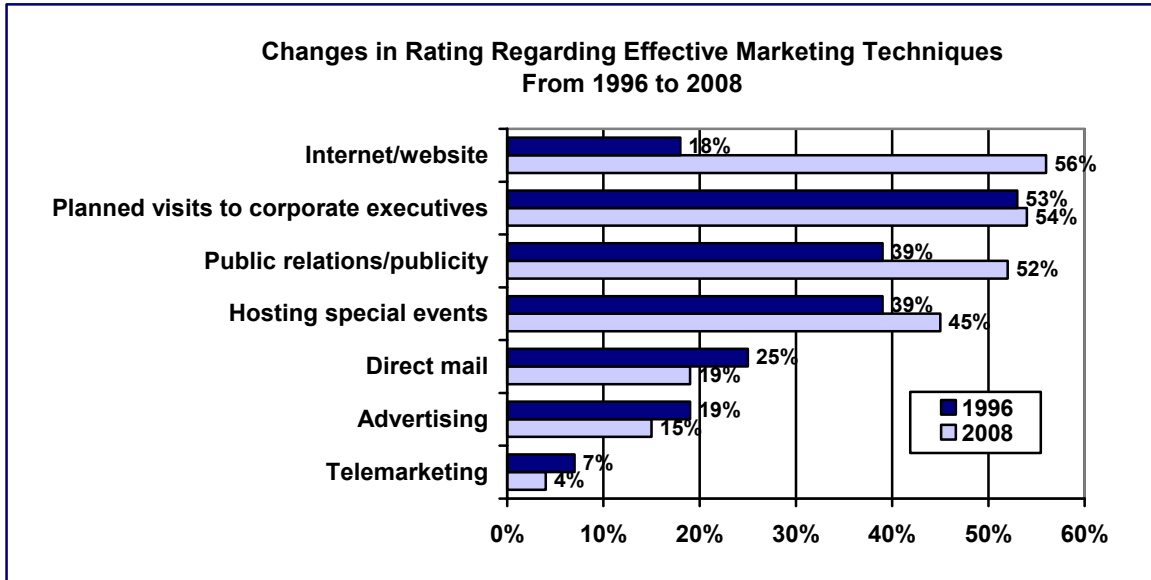
<sup>3</sup> Development Counsellors International, The Corporate View: Winning Strategies in Economic Development Marketing, 2008.

**LEADING INFORMATION SOURCES ON BUSINESS CLIMATE**

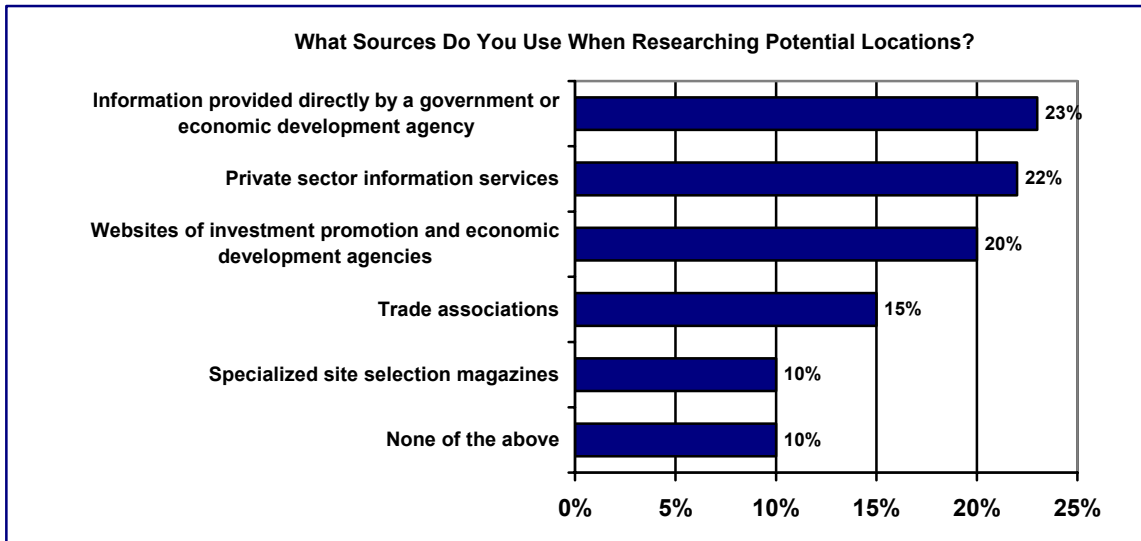
<b>Information Sources</b>	<b>2008</b>	<b>2005</b>	<b>2002</b>	<b>1999</b>	<b>1996</b>
<b>Dialogue with industry peers</b>	61%	54%	56%	71%	68%
<b>Articles in newspapers &amp; magazines</b>	53%	45%	62%	61%	60%
<b>Business travel</b>	42%	45%	47%	45%	52%
<b>Meetings with economic development organizations</b>	32%	33%	21%	27%	24%
<b>Online sources</b>	28%	22%	9%	9%	-
<b>National surveys</b>	22%	17%	23%	31%	34%
<b>Word of mouth</b>	19%	16%	29%	21%	24%
<b>Other</b>	10%	14%	14%	8%	15%
<b>Personal travel</b>	14%	13%	14%	8%	15%
<b>TV/Radio newscasts/shows</b>	7%	5%	14%	7%	4%
<b>Print advertising</b>	3%	2%	4%	3%	4%
<b>Direct mail</b>	2%	2%	2%	3%	1%
<b>TV/Radio advertising</b>	1%	1%	0%	1%	0%

Over the past 12 years, there have been some changes in the use of information sources. The most notable change has been the increased use of online sources, which is now identified as an important source of information on business climate by 28% of the executives and consultants surveyed. With the exception of meetings with economic development organizations, virtually all other sources have declined in importance.

More importantly perhaps, the website has emerged as a very important marketing technique for reaching corporate leaders considering a new site location. According to the Development Counsellors International survey, 56% of the senior executives now consider the Internet and website to be a very effective marketing technique for making corporate leaders aware of a new site location (up from 18% in 1996). As indicated below, Internet/websites ranked first among all of the marketing mechanisms in 2008. Other effective techniques include planned visits to corporate executives, public relations/publicity, and hosting special events.



In a survey of leading manufacturing companies completed for the National Association of Manufacturers, websites of IPAs or economic development agencies were the third most preferred source of information on specific locations after information provided directly by a government or economic development agency and private sector information services.



**B. INTERVIEWS WITH BUSINESSES AND KEY INFORMANTS**

This section provides an overview of the investment plans of the businesses which were interviewed, the location decision criteria and process which will be employed by those considering new investments, and the level of interest in and perceptions of Maple Ridge.

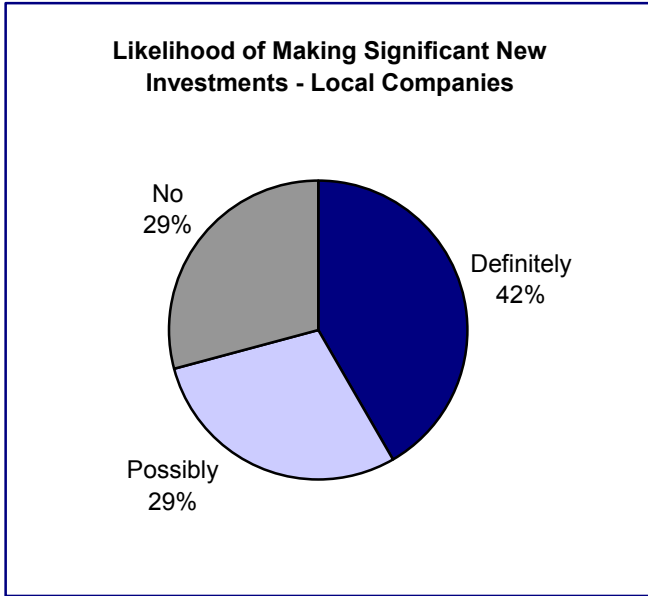
The table on the following page summarizes the characteristics of the companies and key informants that we interviewed.

DESCRIPTION OF RESPONDENT GROUPS

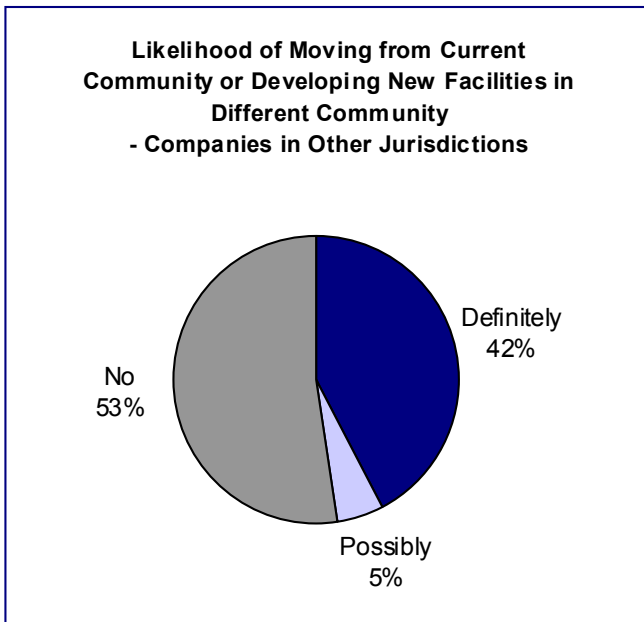
Respondent Type	Description of Organizations	
<p><b>Key Informants</b></p> <p>(N = 25)</p>	<p><b>Organizations</b></p> <ul style="list-style-type: none"> <li>▪ BC Innovation Council</li> <li>▪ Linx BC</li> <li>▪ BC Stats</li> <li>▪ Chamber of Commerce</li> <li>▪ City of Maple Ridge</li> <li>▪ Community Futures</li> <li>▪ Government of BC</li> <li>▪ Industry Canada</li> <li>▪ Invest BC</li> <li>▪ Other municipal governments of the Lower Mainland</li> <li>▪ Other technology associations</li> <li>▪ Western Economic Diversification</li> </ul>	
<p><b>Maple Ridge Technology Companies</b></p> <p>(N = 24)</p>	<p><b>Technology Sub-Sector</b></p> <ul style="list-style-type: none"> <li>▪ Broadband communications products</li> <li>▪ Computer products and services</li> <li>▪ Environment technology</li> <li>▪ Film studio and production</li> <li>▪ Instrumental production and design</li> <li>▪ Online marketing</li> <li>▪ Remote secure companies</li> <li>▪ Services providers</li> <li>▪ Software development</li> <li>▪ Technology consulting and management</li> <li>▪ Web design and hosting</li> </ul>	
<p><b>Technology Companies in Other Jurisdictions</b></p> <p>(N = 101)</p>	<p><b>Cities</b></p> <ul style="list-style-type: none"> <li>▪ Burnaby</li> <li>▪ Kelowna</li> <li>▪ Langley</li> <li>▪ Richmond</li> <li>▪ Surrey</li> <li>▪ Vancouver</li> </ul>	<p><b>Technology Sub-Sector</b></p> <ul style="list-style-type: none"> <li>▪ Alternative engine fuels</li> <li>▪ Animation/Gaming</li> <li>▪ Digital film</li> <li>▪ Environmental instrumentation</li> <li>▪ ICT manufacturing</li> <li>▪ ICT services</li> <li>▪ Telecommunication services</li> <li>▪ Web services</li> </ul>

**1. Investment Plans**

To assess the potential to attract further investment by the technology sector in the community, we first look at the intention or investment plans of the technology companies over the next two to three years. Local companies in Maple Ridge and companies in other jurisdictions were asked about their plans to make new investments as well as the significance of their investment in terms of dollar amount and additional staff members.



When asked if their business is planning to make a significant new investment over the next two to three years, 42% of the Maple Ridge technology companies responded with “Definitely Yes” while 29% said “Possibly” and 29% said “No”. Of those who are definitely or possibly planning for a new investment, the value of investment ranges from as little as \$3,000, for a relocation and retail upgrade, to approximately millions of dollars for an expansion in manufacturing operations. Some of these companies indicated that their expansion plans will create additional jobs, ranging from 1 to 100 additional staff members. In total, these companies anticipate investing \$30 million dollars and creating 110 new positions.



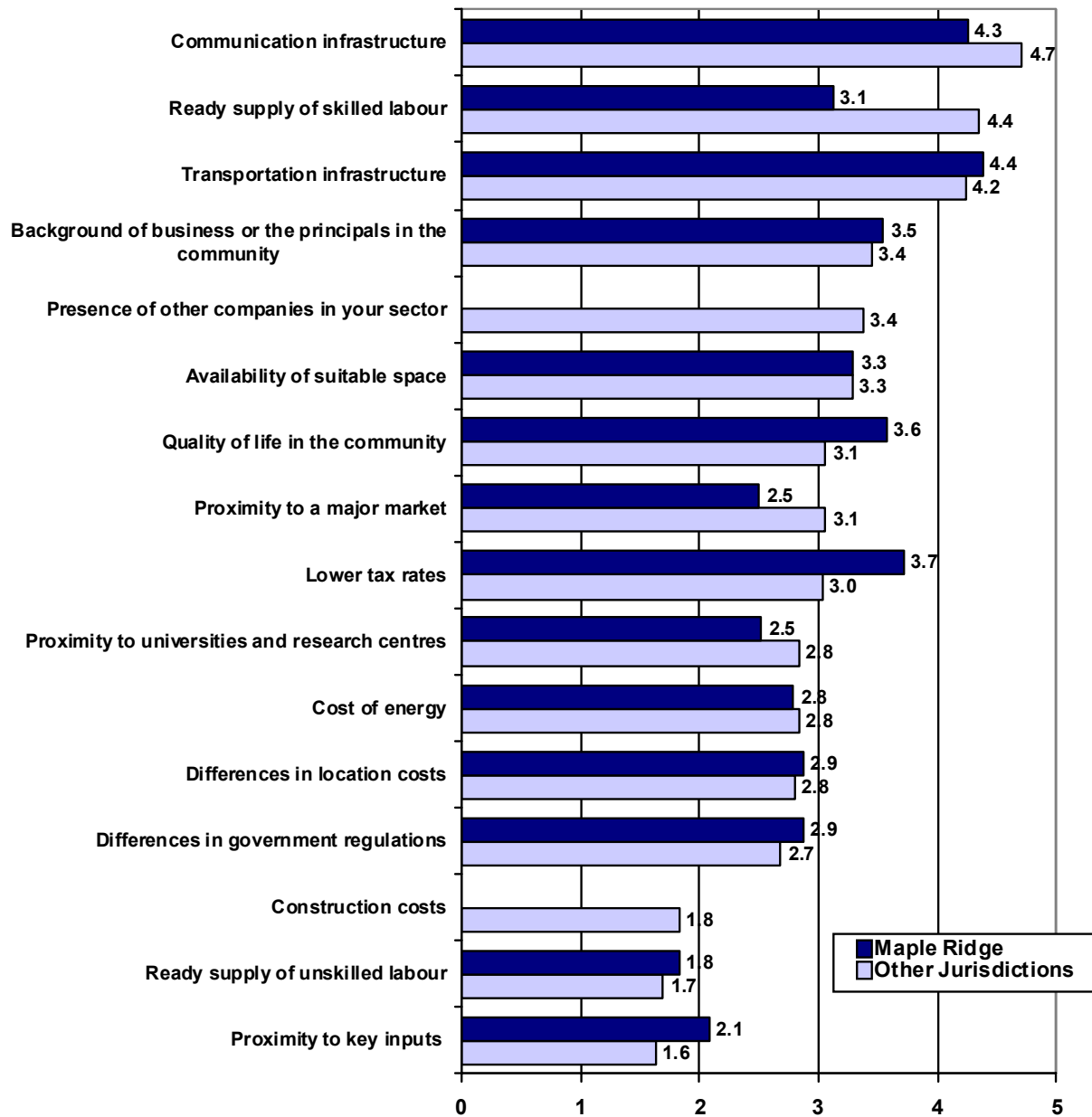
Similarly, we interviewed 101 companies from other jurisdictions to determine their investment plans for the next three to five years. Of these 101 companies, 47% are considering making a significant new investment. On average, there is a 42% likelihood that these companies will make new investments outside of their existing communities. Those considering moving or developing new facilities in a different community estimate that they may invest \$52 million dollars (ranging from \$30,000 to \$25 million) and create a total of 675 new positions (ranging from 1 to 100).

**2. Decision Criteria and Process**

We also asked the companies to identify the criteria that they will use in making their investment decisions. As indicated in the chart on the following page, Maple Ridge companies

identified the transportation infrastructure, the communication infrastructure, and tax rates as significant criteria while companies in other jurisdictions identified the communication infrastructure, supply of skilled labour, and the transportation infrastructure as the most significant location criteria.

Comparison of Average Ratings on Criteria Applied in Location Decisions  
(Maple Ridge Companies vs. Companies in Other Jurisdictions)



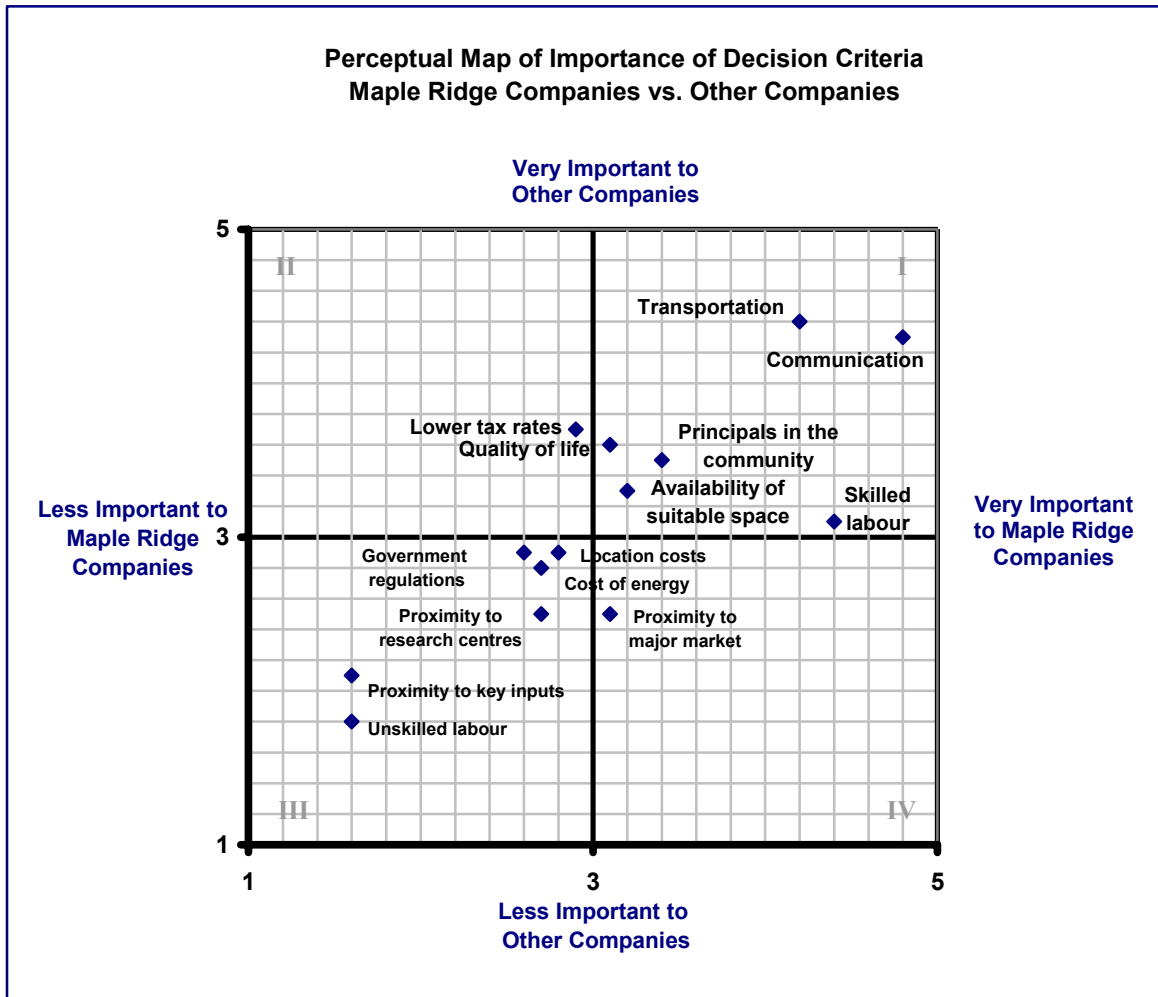
Where 1 is not a very important factor, 3 is somewhat of a factor, and 5 is definitely a deciding factor

The major decision criteria are discussed as follows:

- Communication infrastructure** was rated as one of the most important deciding factors by both companies in other jurisdictions and Maple Ridge (average ratings of 4.7 and 4.3 respectively). Over 80% of all respondents identified high-speed Internet as the vital need to their business in terms of communication infrastructure while some also mentioned the need for strong cellular phone and teleconferencing infrastructure.

- **Ready supply of skilled labour** was more commonly recognized as a deciding factor amongst companies in other jurisdictions (providing an average rating of 4.4, as opposed to an average rating of 3.1 amongst Maple Ridge companies). Companies were most likely looking for positions such as technicians (e.g., systems personnel, electrical technicians, service personnel, hosting specialists, and computer technicians – identified by 21 respondents), software programmers (11 respondents), software developers (7 respondents), mechanical/electrical engineers (5 respondents), web designers (5 respondents), and customer service/marketing personnel (3 respondents).
- **Transportation infrastructure** was considered the most important factor by Maple Ridge companies and the third most important by companies in other jurisdictions (average ratings of 4.4 and 4.2 respectively). Most (87%) respondents identified road and highway access as the major need with respect to the transportation infrastructure while 58% highlighted the importance of the transit system for the commuting of their employees. A few respondents said that most of their staff members reside in the downtown Vancouver area and would be reluctant to travel to Maple Ridge if the office relocates. Mentioned less often were transportation needs in terms of access to ports and airports.
- **Tax rate** was identified as one of the top three deciding factors for Maple Ridge companies, who provided an average rating of 3.7 as opposed to the average rating of 3.0 from companies in other jurisdictions.
- **Quality of life in the community** was somewhat more likely to be considered as a deciding factor by Maple Ridge companies than by companies in other jurisdictions. While Maple Ridge companies gave an average rating of 3.6, companies in other regions gave an average rating of 3.1.
- **Background of business or the principals in the community** was rated as fairly important. A few respondents from other regions viewed the “country-style image” of Maple Ridge as not very appealing for hi-technology companies.
- **Availability of suitable space** for office, warehouse, or retail locations was on average rated at 3.3 by both groups of companies. When asking the respondents to specify their space requirements, the size of land required ranged from 1,600 square feet to as much as 435,600 square feet, with an average of 43,393 square feet per company.
- **Proximity to a major market** was viewed more importantly by companies in other regions who provided an average rating of 3.1 as opposed to 2.5 for Maple Ridge companies. Respondents most commonly identified Vancouver (particularly downtown Vancouver) as their major market, while a few mentioned other cities in the Lower Mainland such as Richmond and Burnaby.

The following map compares the importance of various deciding factors to Maple Ridge companies and companies in other jurisdictions. As indicated, the first quadrant includes factors that are considered very important to both groups of companies while the third quadrant shows the less important factors.



The presence of other companies in their sector or cluster can also affect the investment decision (given the average ratings of 3.4). Other factors that were generally considered of less importance include differences in location costs (e.g., commercial/industrial real estate prices, rents, and property taxes), differences in government regulations, cost of energy, proximity to universities and research centres, proximity to key inputs, and ready supply of unskilled labour.

We also asked the key informants to identify the major criteria used by businesses in deciding where to invest. The perceptions of key informants are somewhat similar to that of companies from other jurisdictions. The factors most commonly identified included:

- Ready supply of skilled labour (identified by 18 key informants);
- Cost of operating a business (14 key informants);
- The communication infrastructure (10 key informants);
- The transportation infrastructure (8 key informants); and
- The local business opportunities or client base (8 key informants).

Mentioned less often were factors such as location (proximity to major markets, resources, and research centres), government regulations and tax incentives, lifestyle/quality of life, the availability of space, the transit system, and amenities in the community.

When specifically asked if fibre optics and the communication infrastructure were important factors, key informants generally thought these were important factors for the technology industry.

### **3. Interest in Investment in Maple Ridge**

The major findings of our research regarding interest in investing in Maple Ridge are as follows:

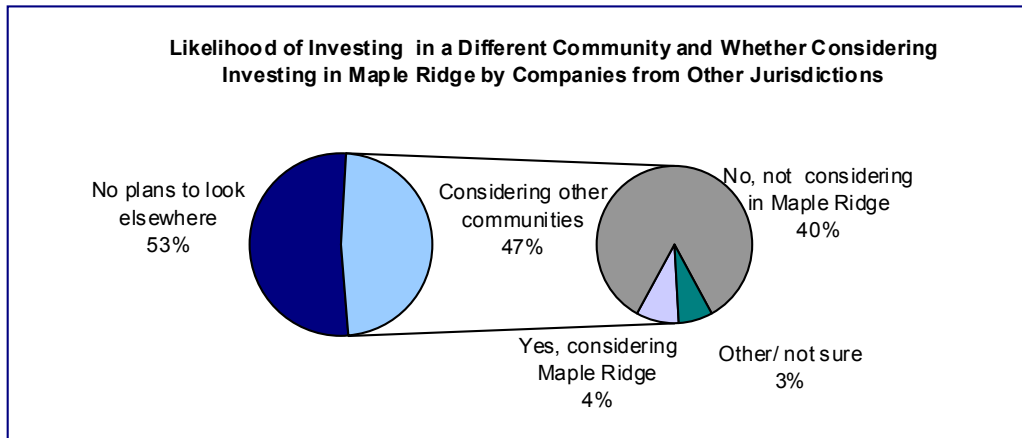
- **Local companies are much more likely to consider making new investments in Maple Ridge.**

We asked those companies who are planning to move or make new investment in a different community whether they consider Maple Ridge as a new investment location and how likely it is for them to make this investment in Maple Ridge rather than in other jurisdiction. Not surprisingly, local companies who have already settled in Maple Ridge are very likely (on average of 77%) to make their new investment in Maple Ridge. Local companies noted that their existing presence in the community, as well as the inexpensive living and land costs encourage them to make further investments in Maple Ridge. However, the companies with highest expected size of investment were those least likely to be planning to make their new investment in Maple Ridge. As a result, the expected value of the new investment (based on the projected size of new investment multiplied by the probability of making that investment in Maple Ridge) totals only \$2.4 million amongst the 24 Maple Ridge technology companies (this represents only about 8% of the total investment of \$30 million planned by these companies).

Companies planning new investments in Maple Ridge were drawn from a range of technology sub-sectors (e.g., web design, technical services, communications, computer services, custom manufacturing, and energy) and tended to be small in size (employing 10 staff members or less with revenues ranging from \$500,000 to \$3 million). Local companies planning investments elsewhere tended to be larger in size.

- **Technology companies from other jurisdictions are much less likely to consider making investments in Maple Ridge.**

Fewer than 5% of the companies interviewed from other regions of BC who are planning to move or develop additional facilities in a new community over the next three to five years are considering making that investment in Maple Ridge. When asked how likely it is that the investments will be made in Maple Ridge rather than in another jurisdiction, one company said 100%, two companies said 50%, and one said 20% likelihood. The technology companies indicated they are much more likely to invest in other Lower Mainland communities such as Vancouver, Richmond, and Burnaby.



**C. STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS**

The result of our review indicate that there are some opportunities to attract investment from the high tech sector to Maple Ridge. Some of the factors that contribute to the opportunities include:

- **The high technology industry is already one of the largest sectors in British Columbia.** On a chained dollar basis, the high technology industry accounted for 6.4% of provincial GDP in 2006, placing it ahead of most other industries including retail, wholesale, construction, wood products, forestry, and agriculture.
- **The sector is undergoing rapid growth.** The revenues of the high technology industry increased from \$8.9 billion in 1997 to \$15.9 billion in 2006, equal to an average annual increase of 6.2%. Growth is driven by our strong capabilities, growing markets, and competitive strengths associated with BC and, more specifically, the Lower Mainland.
- **As it grows, the sector makes significant new investments.** Forty-two percent are the technology companies surveyed from both Maple Ridge and other communities are definitely planning a significant new investment over the next three to five years. These companies are planning to make over \$80 million in investments.
- **The sector is relatively footloose in terms of where it locates.** Although the companies whom we surveyed wish to remain located in the Lower Mainland, many are open to considering different communities within the region. On average, the companies estimate that there is a 42% likelihood that they will make their new investment outside of their existing community.

All groups were asked to identify what they perceive to be strengths and competitive advantages of Maple Ridge as a location for investment. These included:

- **The District offers technology companies lower costs** in terms of housing, operating costs and business leases and land relative to other areas in the Lower Mainland. Companies can expect to benefit from lower costs across the board.
- **The high quality of life in Maple Ridge.** The District benefits from scenery, cleanliness, tranquility, a clean environment, and a sense of community. Maple Ridge offers a range of recreational opportunities from horse riding trails to fishing, has an excellent moderate climate year round, and provides an ideal environment for raising a family. As an example, Maple

Ridge has over 100 kilometres of hiking and riding trails.

- **Much improved transportation.** The two new bridges and highway improvements will improve ease of access and reduce commuting and travel times. The District is poised to become an east-west and north-south hub north of the Fraser River. According to a Metro Vancouver Travel Study, Maple Ridge currently has the second highest average travel time to the other 13 regions in the Lower Mainland during the morning commute, and the highest average in the afternoon commute.

**AVERAGE TRAVEL TIMES BY REGION TO THIRTEEN OTHER REGIONS**

Region	AM	PM
	Minutes	
Abbotsford	56.9	49.4
Maple Ridge	55.1	55.4
Vancouver CBD	30.2	34.8
North Vancouver	34.7	46.3

Source: Metro Vancouver Transit Study

As the following table illustrates, travel times will be significantly reduced between Maple Ridge and other regions with the completion of the new bridges.

**AVERAGE TRAVEL TIMES BETWEEN MAPLE RIDGE AND OTHER REGIONS IN THE LOWER MAINLAND**

Time	Travel	Pre-Bridge	Post Bridge
		Minutes	
AM	Maple Ridge to Vancouver CBD	68	30-40
	Maple Ridge to Abbotsford	69	20
PM	Vancouver CBD to Maple Ridge	59	30-35
	Abbotsford to Maple Ridge	58	20

Source: Metro Vancouver Transit Study

- **A strong local business community.** Across a variety of sectors, businesses are committed to the District and to staying in the region.
- **Growing population base.** Housing costs in Maple Ridge are considered very competitive to other municipalities in the Lower Mainland, and with the new bridges could be attractive to homebuyers from other regions. Moreover, there is a healthy mix of housing, from hobby farms, brand new condos and homes, to older model homes.
- **Opportunity to work close to home** (affordable housing for the owner and staff), which can make it easier to attract employees and result in an easier commute; and

However, the representatives also identified a number of weaknesses and threats which can constrain the ability of Maple Ridge to attract investment from the high tech industry. These include:

- **The low profile of the region.** Many of the representatives whom we interviewed have very little knowledge of Maple Ridge. Often, representatives have not visited the region or may have visited but are not very familiar with what the community has to offer.
- **Transportation access.** While the bridges will improve transportation, the transit system and links to other communities could be better. Some companies felt that the distance from Vancouver International Airport was an issue.
- **Communications infrastructure.** While the District has plans to expand its broadband network, this has yet to take place. A well-developed communications infrastructure would make the region more attractive to some technology companies.
- **Absence of major technology companies or anchors around which the cluster could develop.**
- **Access to skilled workers.** There is the perception that the District does not have a very well educated or skilled workforce. Moreover, there is the view that it may be difficult to attract skilled workers to Maple Ridge because of commuting time and lack of transit.
- **Strong competition from other Lower Mainland communities.** Access to markets, education programs, and transportation and communication infrastructure were considered strong competitive advantages for Vancouver, Richmond, and Burnaby. More specifically, Richmond enjoys the proximity to Vancouver as well as the convenient access to the airport and other amenities. Burnaby attracts technology investments not only because of its proximity to Vancouver but also the availability of industrial land and having a major player like Electronic Arts. Other cities in the Lower Mainland mentioned by representatives as potential competitors include Surrey, Langley, Coquitlam, Pitt Meadows, Abbotsford, New Westminster and Port Moody.

A summary of the opportunities, strengths, weaknesses and threats is provided in the chart on the next page.

**STRENGTHS, OPPORTUNITIES, WEAKNESSES AND THREATS  
FACING MAPLE RIDGE IN TERMS OF ATTRACTING TECHNOLOGY COMPANIES**

**Opportunities**

- The high technology industry is one of the largest sectors in British Columbia
- The sector is undergoing rapid growth.
- As it grows, the sector makes significant new investments.
- The sector is relatively footloose in terms of where it locates.

**Strengths**

- Lower cost of housing
- Lower cost of living/ operating businesses
- High quality of life – scenery, cleanliness, tranquility, nice neighborhoods and great recreational facilities
- Increased accessibility following the completion of the bridges
- Proximity to other major cities in the Lower Mainland
- Tax incentives for business
- Growth of the District
- Strong community support for local businesses
- Commitment of businesses to staying in the region
- Opportunities to live close to work

**Weaknesses**

- Maple Ridge suffers from a very low profile/image
- Concerns about transportation access
- Under-developed communications infrastructure
- Presence of few major technology companies or anchors
- Access to skilled labour
- Some concerns about the business environment (e.g. government regulations and slow permitting processes)

**Threats**

- Clusters are developing in other regions of the Lower Mainland, involving major anchors (e.g. Electronic Arts), educational providers and suppliers. As the cluster reaches a critical mass, it will become increasingly difficult to attract businesses from these regions
- Increasing competition related to investment attraction from other regions including particularly strong competition from other cities in the Lower Mainland and BC

## V. STRATEGIES FOR ATTRACTING INVESTMENT

This chapter provides a general overview of the functions associated with investment attraction as well as options which could be considered by the District of Maple Ridge

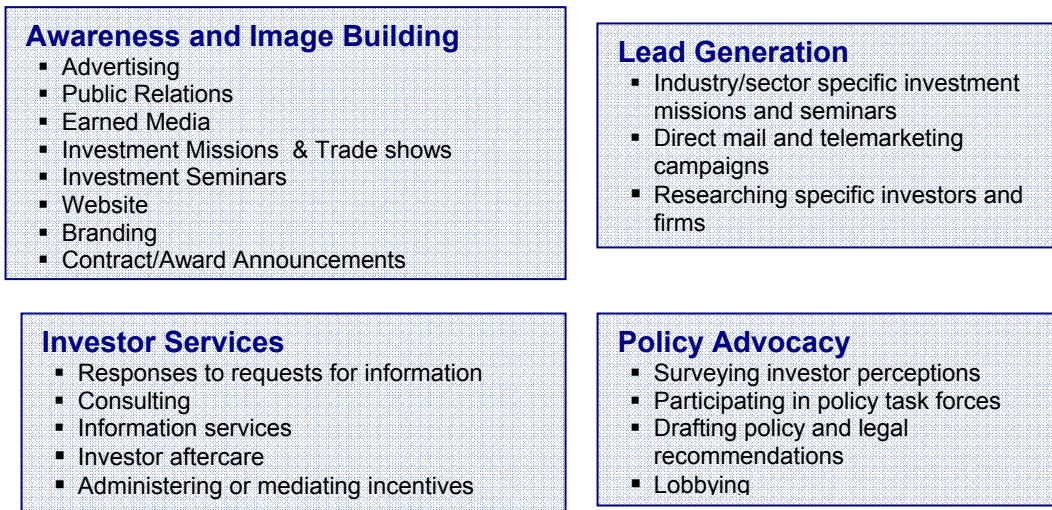
### A. FUNCTIONS ASSOCIATED WITH INVESTMENT ATTRACTION

#### 1. Types of Functions Undertaken

Investment Promotion Agencies (IPAs) undertake a variety of activities to attract investment. These activities can vary from agency to agency depending upon the agency’s mandate, political situation, organizational structure, budget, target audience and clientele.

The core activities undertaken by IPAs can be grouped into four broad categories: awareness and image building, lead generation, investor services and policy advocacy.

#### **TYPES OF ACTIVITIES COMMONLY UNDERTAKEN BY IPAs<sup>4</sup>**



A brief description of each of these categories is provided in the following paragraphs.

- **Awareness and image building** includes activities and events such as advertising, public relations, investment missions, investment seminars, trade shows, and the generation of favourable news stories by cultivating journalists. The fundamental objectives of image building are to raise awareness among potential investors to ensure that the location is on the initial consideration list and to inform potential investors of the advantages of the location over other locations to trigger interest. Image building is a major focus of promotional materials and website design.
- **Lead Generation.** Most IPAs have some type of proactive targeting system that leads to investment generation. IPAs may target specific countries or regions, sectors, or key target groups (e.g. large companies, site selectors, or even highly qualified personnel). Most successful IPAs place a high priority on making personal contact through conferences, trade

<sup>4</sup> Morisset & Andrews-Johnson, 2004, The Effectiveness of Promotion Agencies at Attracting Foreign Direct Investment.

fairs, hosting or participating in outgoing missions, direct high-level meetings, seminars and special events. Other investment generation techniques include advertising, direct mailing, utilizing the Internet as a marketing outreach tool, and developing a complement of promotional materials including investment guides, annual reports, brochures and other reports. Finally, IPAs often utilize consultants (commonly based in the target regions) to help generate investment leads or to develop investment programs. Investment generation activities tend to focus on areas where the region maintains comparative advantages vis-à-vis the selection criteria of potential investors and/or areas of strategic importance where the host region wants to attract investment for reasons of resource availability, comparative advantage or long-term development.

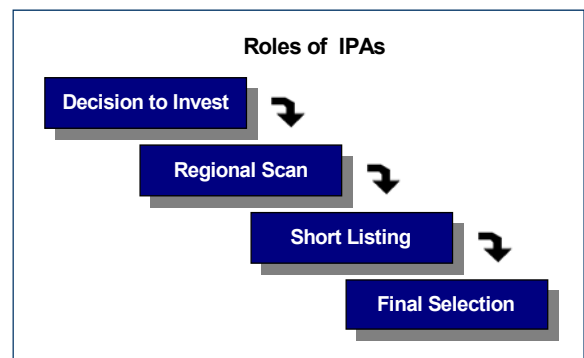
- **Investor Services.** Many IPAs seek to provide a “one-stop shop” information and support service for site selectors and potential investors. The facilitation service may involve consulting and information services, services aimed toward expediting the investment approval process, and investor aftercare. As such, it can involve everything from responding to requests for information and providing data on real estate costs, labour rates, taxation levels, financial and legal implications to matchmaking with potential local investors and providing introductions to the local business community. Most IPAs also provide information and assistance with respect to registrations, work permits, and licensing. More specifically, investment facilitation can encompass:

  - Pre-approval services, which can include information services, site-visit services and procedures for handling investors;
  - Approval services, which can include screening, evaluating and approving projects for incentives and permits required by the government; and
  - Post-approval services, which can include assistance with matters that arise during implementation of a new project such as delivery of permits, access to site and infrastructural facilities, customs and visa clearances, foreign exchange clearances, introductions to local business, government and community leaders.
  
- **Policy advocacy.** IPAs are becoming increasingly active in encouraging federal, provincial and state governments to adopt policies that are conducive to investment attraction. Common activities related to policy advocacy include surveying and reporting investor/private sector perceptions, participating in policy task forces and drafting policy and legal recommendations. Through policy advocacy, IPAs can help governments identify and eliminate economic, legal, regulatory and educational impediments to investment. According to several of the representatives whom we interviewed, investment promotion should be regarded as a complement to, rather than a substitute for, policies that create an attractive investment climate.

**2. Relationship of IPA Activities to the Site Selection Decision Process**

As noted earlier, the site selection decision process commonly consists of four phases:

- The decision to invest;
- Regional scan;
- Short-listing of communities; and
- The final selection.



The activities of IPAs focus primarily on ensuring the region is considered during the regional scan, providing information and other support during the short-listing process, and facilitating the final selection.

**RELATIONSHIP OF IPA ACTIVITIES AND THE SITE SELECTION DECISION PROCESS**

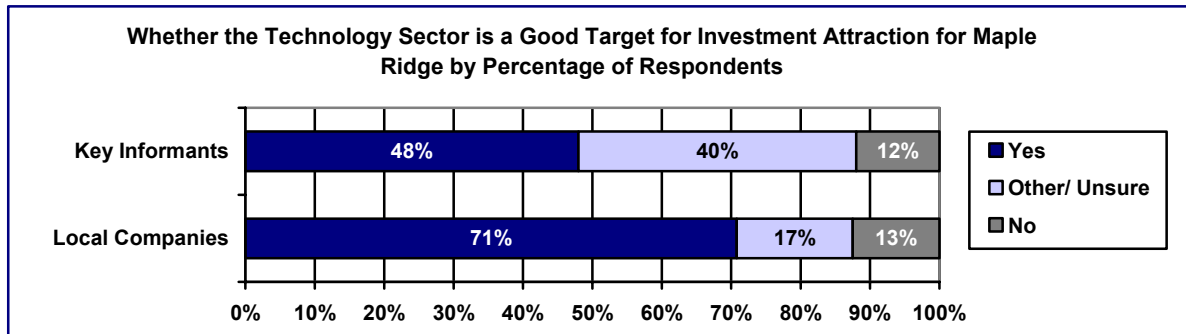
Phase	Responsibility of the IPA
<b>The Decision to Invest</b>	The decision to expand or develop new facilities is usually not directly impacted by the activities of IPAs.
<b>Regional Scan</b>	IPA undertakes a mixture of image building and lead generation designed to ensure that the region is considered as a potential location once the decision is made to invest. Examples of awareness and image building activities can include advertising, public relations, investment missions, investment seminars, trade shows, and the generation of earned media. Examples of targeted lead generation activities can include direct contact with executives, direct mail programs, use of consultants for target markets, targeted ingoing and outgoing missions, and special events.
<b>Short-listing of Communities</b>	IPA plays a key role in working to convert leads into investments. Examples of investor services include responding to enquiries and requests for information, preparing proposals, providing consulting and information services, hosting site visits, and linking potential investors to the local business community.
<b>Final Selection</b>	IPA provides less of a sales function and more of a facilitation function to assist the company access the property, approvals, incentives, and other resources needed to make the investment.

**B. RECOMMENDATIONS FROM BUSINESS AND KEY INFORMANTS**

Recommendations emerging from our survey with businesses and key informants regarding the strategic focus and investment attraction activities are summarized as follows.

**1. Strategic Focus**

Given the likelihood of companies to move or expand operations over the next few years, key informants and local company owners were asked whether they think that the technology sector is a good target for investment attraction for Maple Ridge. As indicated in the chart below, almost half of key informants and over 70% of local company owners thought the technology sector is a good target for Maple Ridge.



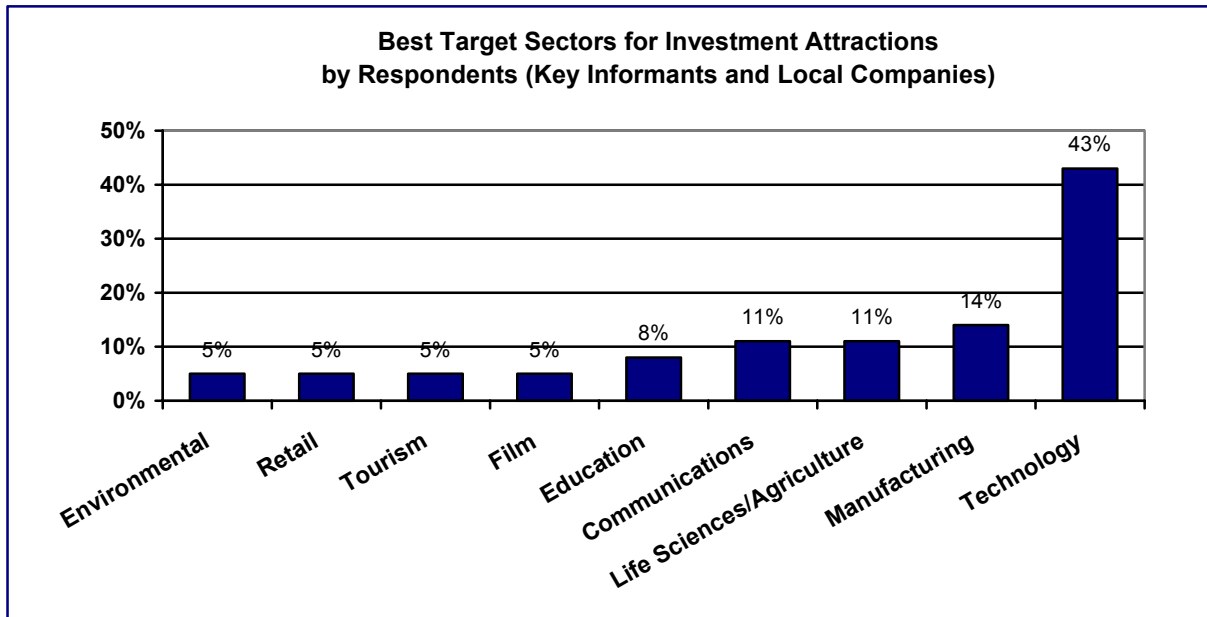
Key informants and local company owners were then asked why they believe the strategic target in attracting investment in the technology sector is good. Respondents identified factors including:

- The potential growth of the technology sector (identified by 16 respondents);
- Increased accessibility of Maple Ridge followed by the completion of the bridge (4 respondents);
- Relatively low cost of living and doing business (4 respondents);
- Proximity to other cities in the Lower Mainland (3 respondents);
- Quality of life in Maple Ridge (2 respondents); and
- Municipal government policy/regulations (2 respondents).

On the other hand, respondents who did not think that the technology sector is a good target for investment attraction activities for Maple Ridge saw barriers in terms of:

- A lack of communication infrastructure in Maple Ridge (7 respondents);
- Attracting skilled workforce to the community (5 respondents);
- No presence of major technology companies (3 respondents);
- Proximity to Vancouver and other cities (3 respondents);
- Competition from other established cities in the Lower Mainland (2 respondents);
- A lack of transportation infrastructure (2 respondents);
- Proximity to research centres/universities (2 respondents); and
- Slow progress in obtaining building permits (1 respondent).

We also asked key informants and local company owners what particular sectors are most likely to invest in Maple Ridge (i.e., the best targets for investment attraction). The results are summarized in the chart below.



Recognizing the focus of our interview to that point was on the technology sector, it is not surprising that respondents most commonly saw the greatest opportunities for investment attraction activities to be in the technology sector (identified by 43% of respondents). Manufacturing was the second most commonly mentioned sector, with a particular focus on light manufacturing, followed by agriculture (including life sciences) and the communications sector. Within the technology sector, opportunities were identified in various segments such as multimedia and digital arts, software development, web design and maintenance, system services, and technology consulting.

Communities or regions that are viewed by key informants as particularly effective in attracting technology investment include:

- Vancouver (identified by 10 respondents);
- Richmond (9 respondents); and
- Burnaby (8 respondents).

Respondents mentioned that having an anchor company such as Electronic Arts (Vancouver, Burnaby) or Microsoft (Richmond) has significantly helped attract other technology companies to make new investment in the communities. Moreover, the three big Lower Mainland cities have well-developed transportation and communication infrastructure that are vital to technology companies. Communities mentioned less often but perceived as effective in attracting businesses include Seattle, Washington (identified by 4 respondents), Silicone Valley, California (3), Montreal, Quebec (2), Toronto, Ontario (2), Oregon (1), San Diego (1), Surrey (1), Kamloops (1), and Kelowna (1).

**2. Investment Attraction Actions**

The major findings regarding investment attraction activities are summarized below.

- **Tax incentives and target marketing are the most recommended investment attraction actions for the District of Maple Ridge.**

Local business owners, companies from outside of Maple Ridge, and key informants were asked to recommend actions for the District of Maple Ridge in terms of encouraging and

attracting businesses to the community. The district action most commonly recommended by key informants is utilizing target marketing and promotions, while local companies recommended improving government regulations, and companies from other jurisdictions recommended offering tax exemptions or incentives. The following table compares the recommendations for district actions by respondent groups.

**COMPARISON OF RECOMMENDATIONS FOR DISTRICT ACTIONS  
BY RESPONDENT GROUPS**

Respondent Groups/ Recommendations	Key Informants	Local Companies	Other Companies	Overall
<b>Recommendations for Investment Attraction for the District of Maple Ridge</b>				
Offer tax exemptions/incentives	20%	23%	49%	38%
Utilize target marketing/promotion	56%	23%	22%	31%
Build an infrastructure	16%	23%	25%	23%
Improve government regulations	16%	46%	15%	19%
Build a technology centre	20%	-	16%	15%
Attract skilled labour/tech students	16%	8%	5%	9%
Partner with research institutions	16%	-	4%	6%
Improve transportation/transit	4%	-	7%	5%
Increase amenities	8%	8%	4%	5%

\*Key Informants N = 25; Local Companies N = 13; Other Companies N = 55

The respondents recommended actions for the District of Maple Ridge in terms of:

- **Offering tax exemption or incentives to businesses (38%).** Particularly attractive to companies from other jurisdictions, tax exemptions or incentives were recommended as a strategic action by more than one third of all respondents. A few respondents suggested modifying the tax structure not only on the business level but also on personal tax, which would help attract both companies and skilled labour to move to Maple Ridge. One representative noted that his company is considering making a new investment in Halifax because of its strong tax incentives.
- **Utilizing target marketing and promotions (31%).** Respondents recommended the District polish its image and increase public awareness through seminars, industry meetings, tradeshows, and events held at post-secondary institutions. Respondents stressed the importance of taking a proactive approach in outreaching to small businesses or companies looking to expand or to increase market penetration. As noted by one respondent, "companies won't say 'let's go to Maple Ridge'" unless Maple Ridge starts to say "look at the great opportunities here." Key informants were more likely to advocate a dedicated marketing strategy by the District that would get the word out to promote the resources and benefits of Maple Ridge.
- **Building an infrastructure (23%).** Recognized as one of the most important, vital needs to high tech companies, a well-established communication infrastructure in Maple Ridge was recommended by many respondents. Especially from outside of Maple Ridge, respondents suggested the District play a lead role in building advanced Internet pipelines and enhancing the infrastructure to encourage business investments in the sector.

- **Improving government regulations (19%).** Business owners, particularly those from Maple Ridge, raised concerns about the district policies regarding business zoning and building permits. While some respondents suggested a more timely process for business licensing, others recognized the need for more table discussions with city council and potential business investors to create a more business-welcoming culture in the community.
- **Building a technology centre or park (15%).** As mentioned previously, respondents indicated that it would encourage investments in Maple Ridge if the community has a dedicated technology park to showcase the models, resources available, and case studies to attract business investments. Alternatively, an anchor company like Electronic Arts can serve as a focal point and attract other technology businesses to locate in Maple Ridge.

Other recommendations regarding District actions include attracting a skilled labour pool by encouraging technology professionals and students to move to the District (9%), encouraging further development of post-secondary institutions and training schools (6%), improving the transit systems in Maple Ridge (5%), and increasing amenities in the community (5%).

- **Companies from other jurisdictions are unlikely to use the services of a site selection consultant.**

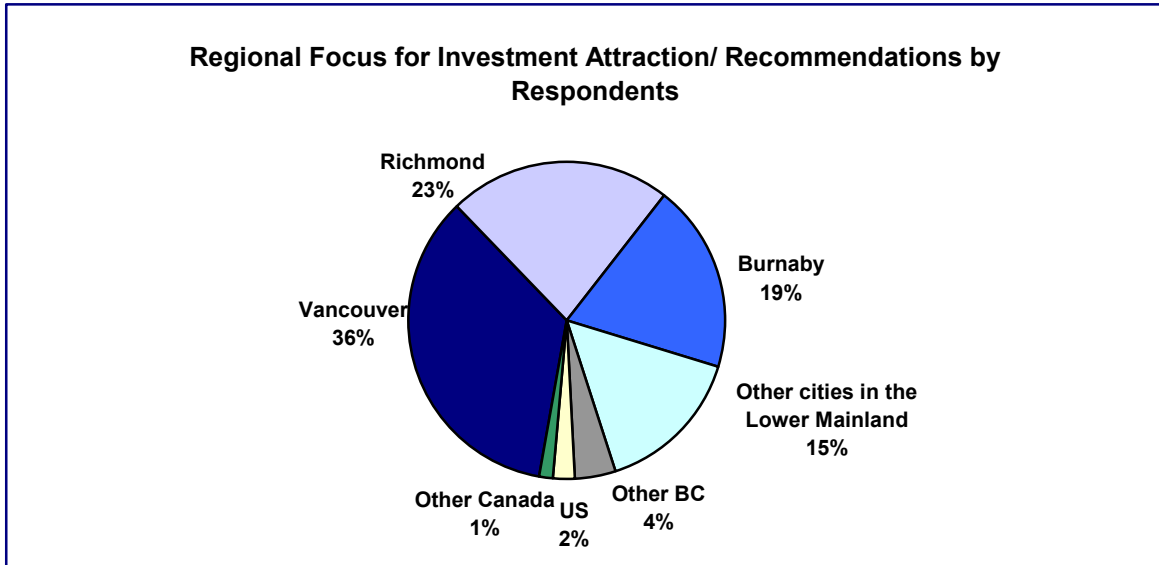
We asked technology companies from other jurisdictions whether it was likely for them to use the services of a site selection consultant if they were to move the operation over the next few years. Of these companies, less than 5% anticipate using the services of a site selection consultant while 96% of the companies responded with no intention to use such services. This may be due to the fact that most firms in the sector are relatively small in terms of the number of staff and the revenues generated, which limits the budget on site selection for investment. In fact, according to the 2007 site selection consultant survey done by Area Development Magazine, those companies utilizing consultants’ services are generally mid-size, large, or very large organizations in terms of employment numbers<sup>5</sup>.

- **Investment attraction activities could focus most heavily on Vancouver, Richmond, and Burnaby.**

Key informants, local companies, and companies from other jurisdictions were asked to identify regions outside of Maple Ridge where investment attraction activities focus on. As indicated in the chart on the following page, the major cities identified were Vancouver (36%), Richmond (23%), and Burnaby (19%).

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<sup>5</sup> Only 16% of those responding to the survey said they have worked with small (20-99 employees) companies while 32% have worked with mid-size (100-499 employees), 23% have worked with large (500-999 employees), and 29% have worked with very large (1000 or more employees) companies.



- Trade magazines or publications and virtual websites are considered the most effective promotion strategies in outreaching to the technology sector, whereas bulk emails, mass media and radio/TV advertisements are considered the least effective.

Respondents were asked what they consider as the most and the least effective strategies in terms of outreach to the sector. Trade magazines were the most commonly identified effective strategies for investment attractions in the technology sector, followed by promotions through virtual websites and industry associations. The following table summarizes the effective promotion strategies by respondent groups.

**COMPARISON OF EFFECTIVE PROMOTION STRATEGIES BY RESPONDENT GROUPS**

Respondent Groups/ Effective Strategies	Key Informants	Local Companies	Other Companies	Overall
<b>Effective Strategies for the Technology Sector</b>				
Trade magazines/publications	28%	39%	40%	38%
Virtual websites	16%	57%	35%	35%
Industry associations	28%	9%	36%	30%
In person/knock on doors	20%	4%	13%	13%
Events and tradeshow	20%	9%	6%	9%
Government	12%	4%	4%	6%
Local Newspaper	-	4%	6%	5%
Radio	-	-	7%	5%
Realtor	16%	-	3%	5%
Television campaign	4%	9%	1%	3%
Testimonial/word-of-mouth	12%	-	1%	3%

\* Key informants N = 25; Local Companies N = 23; Other Companies N = 95

Publications such as *Business in Vancouver* and *BC Business* were frequently mentioned as good examples of how Maple Ridge should promote to technology companies. Other magazines identified include *Reel West*, a publication source of information for film, video and

multimedia production, and *Backbone* magazine, a Vancouver-based publication focusing on technology and business integration.

Despite a few positive comments about the District’s website, many felt that improvements can be made in terms of targeting technology companies, providing business journals and news radio clips, and increasing user-friendliness and interaction. Some respondents also suggested partnerships with other well-known virtual communities such as Techvibes, Facebook, Youtube, and Blogger. Partnerships with industry associations, such as the Vancouver Board of Trade, British Columbia Film, BC Industry Training Authority, and other technology associations, were considered as another effective stream.

On the other hand, bulk emails or spam, the general mass media that target the whole population, radio advertisements, as well as television commercials were identified as the least effective promotion strategies in terms of attracting investment in the technology sector.

### C. STRATEGIES, ACTIONS AND RECOMMENDATIONS

To develop an investment strategy it is helpful to have a Framework including time lines, the general focus, some of the activities involved in the strategy, and the roles of the various players within the District, EAC, EDO and larger community. To that extent, there may be some value in the EAC establishing a committee to review the framework and recommendations to ensure they align and are consistent with the District and EAC’s mandate and business plan. The major components of an investment strategy framework could include:

- **Strategy** – this would be provide a longer term (5-10 years) focus on investment for the community and would involve community and sector plans and strategies, planning cycles, and the oversight and support roles of the District, EAC and Economic Development Office.
- **Actions** – this would provide a shorter term (1-3 years) focus on investment for the community and would involve more specific activities such as EAC Committee work, acting on recommendations in the High Tech Investment Strategy, retention strategies, etc. with the lead being the EAC and EDO, with the support of the general community.
- **Operational** – this would involve a near term, day-to-day focus on investment for the community and would involve such activities as hosting visitors, working with the press, and responding to inquiries with the lead being the EDO, with the support of EAC, champions, EAC and the District.

Various components of the Framework could be changed as time goes on, and projects or initiatives are started or completed. A summary of an Investment Strategy Framework can be found in the following table.

#### INVESTMENT STRATEGY FRAMEWORK FOR MAPLE RIDGE

Level	Years	Focus	Actions	Leads
<b>STRATEGY</b>	5-10	Policy & Planning, longer term	<ul style="list-style-type: none"> <li>▪ OCP</li> <li>▪ EAC Business Plan</li> <li>▪ High Tech Investment Attraction Strategy</li> <li>▪ EDO Planning</li> </ul>	<ul style="list-style-type: none"> <li>▪ District</li> <li>▪ EAC</li> <li>▪ EDO</li> </ul>

Level	Years	Focus	Actions	Leads
<b>ACTIONS</b>	1-3	Tactical, shorter term	<ul style="list-style-type: none"> <li>▪ EAC Committees</li> <li>▪ High Tech Investment Attraction Strategy</li> <li>▪ Retention Strategy</li> <li>▪ Events and Conferences</li> <li>▪ Other Programming</li> </ul>	<ul style="list-style-type: none"> <li>▪ EAC</li> <li>▪ EDO</li> <li>▪ Community</li> </ul>
<b>OPERATIONAL</b>	Now	Action items, near term	<ul style="list-style-type: none"> <li>▪ Visits and Outreach</li> <li>▪ Earned Media</li> <li>▪ Hosting visitors</li> <li>▪ Responding to inquiries</li> <li>▪ Other day-to-day activities</li> </ul>	<ul style="list-style-type: none"> <li>▪ EDO</li> <li>▪ Champions</li> <li>▪ EAC</li> </ul>

Based on the results of our research, we have developed a set of general recommendations regarding investment attraction activities. These recommendations reflect the following four major themes:

- *Target*, which reflects the need to clearly define the targets, focus and objectives of the investment attraction strategy;
- *Communication*, which relates to the development and implementation of a strong communications program;
- *Business Environment*, which involves facilitating development of a positive business environment, suitable commercial and industrial space, and the supporting infrastructure need to attract the target companies; and
- *Relationships*, which involves building strategic relationships with others who can support investment attraction.

Our preliminary recommendations regarding the steps that could be undertaken in the development and implementation of an investment attraction strategy for Maple Ridge are as follows:

**TARGET: Clearly define the focus and objectives of the investment attraction strategy**

As part of this process, it will be important to:

- **Define the target sectors for investment attraction broadly.** This report has focused on the high technology sector. While opportunities for investment attraction exist in this sector, there are also opportunities that may be as or even more significant in a wide variety of other sectors. For example, the District has a track record in attracting investment related to cedar products and machinery, forestry and forestry research, film, light manufacturing, occupational training, agricultural and the retail/commercial sectors. Obviously, Maple Ridge is well positioned to host any number of sectors, based on its location and infrastructure.
- **Focus on both resident and non-resident companies.** Businesses already existing in the community will be a major source of new investment. Providing aftercare services to local companies can not only help retain their existing operations but also facilitate reinvestment, expansion, and diversification.
- **Determine how aggressive the investment attraction activities should be.** The priority that should be placed on investment attraction activities will be a function of the availability of space

suitable for prospective businesses, the availability of funding for promotional activities, and the objectives of the District with respect to growth.

- **Focus on companies that are most accessible to Maple Ridge.** Priority should be given to companies with a significant presence in the Lower Mainland (i.e. it is easier to attract companies that are familiar with, and serve customers from, this region).
- **Build on the existing activities and capabilities of the Economic Development Department.** The Economic Development Department provides a “one-stop shop” of information and support for potential businesses, site selectors and potential investors including data such as real estate costs, labour rates, taxation levels, and local infrastructure as well as information and assistance with respect to registrations, work permits, and licensing. The District and Economic Development websites contain information on business development, sales and leasing inventory, starting your own business, 2010 business opportunities, city land opportunities, land development and building, and licensing.
- **Track the results.** The Economic Development Department should produce a short summary of the results from each trade show, event and promotional program, use a database to track the status of leads, conduct a periodic survey of businesses, and produce an annual report for review by the Economic Advisory Commission, community and key funding sources.

#### **COMMUNICATIONS: Develop and implement a strong communications program**

The communications program should stress the competitive strengths of Maple Ridge, which were outlined in the previous chapter. Components of the communications program could involve:

- **Establish a strong, clear and consistent brand for Maple Ridge.** Maple Ridge needs to establish a higher profile which includes a clearly defined identity. Establishing a strong brand may involve conducting research to determine the most appropriate brand positioning, clearly defining the audience for the brand positioning (e.g. existing and potential residents, workers, visitors, and businesses), and developing and implementing communication strategies and programs that support the brand. The development of a clear brand will require the coordinated participation of a wide variety of initiatives and organizations.
- **Introducing an earned media program.** An earned media program can be a highly effective promotional tool for targeting potential high technology companies. Earned media can trigger interest amongst potential companies to ensure the District is on the initial consideration list as well as raise awareness of the area’s competitive advantages. Research has indicated that articles in newspapers and magazines are the most influential source of information in the location decision for senior executives. Actions that can be taken to generate earned media include:
  - Developing relationships with local, national and international media outlets.
  - Encouraging local companies, politicians and government representatives to interact with media representatives regularly during trade missions, special events, and trade shows to generate news stories or feature profiles.
  - Hiring independent writers to develop articles for submission to various publications.
  - Staging familiarization tours, hosting one or more writers from various publications who

will then develop their own stories.

- ***Continuing to upgrade the website over time.*** Over the past 10 years, websites have supplanted promotional and informational materials such as brochures, investment guides and information pieces as the most important marketing tools for IPAs.
- ***Developing targeted collateral materials and implementing advertising or media promotions program.*** The brand identity of the website should carry through to the marketing materials. Collateral marketing materials could include inserts (relevant to specific targets and sectors) to be distributed in a standard folder as well as standard PowerPoint presentations that can be quickly adapted for specific situations. Another option is to strategically place advertisements in trade magazines and other publications. Publications such as *Business in Vancouver* and *BC Business* were mentioned as good examples of how Maple Ridge should promote to technology companies. Other magazines identified include *Reel West*, a publication source of information for film, video and multimedia production, and *Backbone* magazine, a Vancouver-based publication focusing on technology and business integration. There may also be opportunities to communicate through promotion on virtual communities like Techvibes, Facebook, Youtube and Blogger.
- ***Attendance at targeted trade shows.*** The strategic use of trades shows can involve pre-show marketing (following up with past leads and working to generate new leads in advance of the show), logistical planning and support, implementing the planned activities (e.g. staffing a booth, hospitality events, making presentations to local offices and business groups, and implementing an associated earned media program), and following up with leads shortly after the show to capitalize on the opportunities identified.
- ***Placing a priority on establishing personal contact.*** The most successful programs tend to place a high priority on making personal contact with key target groups through meetings, seminars and conferences; hosting target businesses, site selectors, and realtors at special events; and participating in outgoing missions (e.g. sales calls).
- ***Responding to inquiries and provide other investor support services on an as needed basis.***

***BUSINESS ENVIRONMENT: Strengthen infrastructure and build a strong business environment that is appealing to target companies***

Access to suitable commercial and industrial space, key infrastructure, and a positive business environment can have a significant impact on investment attraction strategy. To this end, the District of Maple Ridge should consider:

- ***Strengthening the telecommunications and transportation infrastructure.*** The District has developed a broadband plan that would provide various District departments with broadband connections. If developed and built, broadband service could be used as tool to help attract companies, especially those with the need for significant data transfers. The District could also look at expanding the free wireless downtown project to other areas. There has also been a need identified to improve the transit system to meet the needs of new neighbourhoods and commercial and industrial build outs.
- ***Assess the current and projected supply of suitable commercial and industrial space.*** A high technology sector attraction program needs to be consistent with availability of suitable

commercial and industrial space. The District and the Economic Development Department should continue to work with landowners, developers, realtors and the industry to maintain an inventory of technology friendly sites. For instance, the downtown area has free wireless service which may be attractive to smaller, start-up companies. Maple Ridge has a core of existing technology companies that could be built upon. Finally, there may be an opportunity to develop a technology centre or park in some of the commercial or industrial areas of the District.

- **Review available and possible incentives to attract high technology companies.** Local businesses recommended continuing efforts to improve zoning to reflect the special needs of the sector, and improving the building and permitting processes to ensure timely delivery. There may also be a need to review the tax landscape, to ensure that Maple Ridge is competitive with other jurisdictions. Also, there is a need to maintain up-to-date information on available municipal, provincial, federal incentive programs and other assistance that could help the high technology sector.
- **Work with educational organizations to promote high technology education.** This could include encouraging institutions to locate in Maple Ridge, or to offer or expand specific programs. The District has developed linkages with Douglas College, which has the Thomas Haney campus in the District, and is close to the UBC Malcolm Knapp Research Forest. Wherever possible, efforts should be made to integrate educational programming with local industry, government agencies, and educational organizations.

**RELATIONSHIPS: Build strategic relationships with others who can support investment attraction**

As part of the investment attraction strategy, the Economic Development Department should:

- **Maintain on-going channels of communication with existing businesses** (through joint activities, meetings and periodic surveys) as a means to keep abreast of the key issues which will impact upon both business retention and investment attraction.
- **Establish a business ambassador program to assist with investment attraction.** Building on the existing relationship with businesses, consideration should be given to the development of a businesses ambassador program. Ambassadors are existing businesses in community that volunteer to help promote Maple Ridge at meetings, events and conferences by handing out materials (e.g. brochures and CD's with information about the community) and referring prospective businesses to the Economic Development Department. Ambassadors may also participate in hosting visits from businesses considering relocation to Maple Ridge.
- **Partner with other organizations that have a mandate related to investment attraction.** Successful programs typically involve strong partnerships with the Chamber of Commerce, educational organizations, other industry organizations, companies, government and other stakeholders. These partnerships can be informally based, project oriented, or can take place over time working in conjunction with a consortium or long term marketing objective. In addition to working private sector companies, there are opportunities for Maple Ridge to coordinate activities with other municipalities located along the north Fraser in encouraging companies to locate in the region as well as work with other organizations such as Invest BC and Linx BC.

As in any community, Maple Ridge faces challenges in terms of resources, funding and personnel. Therefore we have made nine target recommendations as focal points for the community in terms of investment attraction. These target recommendations are offered with the realization that some may be

dropped, or others added as priorities and resources change and evolve.

The following table summarizes some of the key recommendations for attracting investment to Maple Ridge.

**KEY INVESTMENT ATTRACTION RECOMMENDATIONS FOR MAPLE RIDGE**

<b>TARGET</b>					
<b>Target</b>	<b>Specific Targets</b>	<b>Potential Activities</b>	<b>Measureables</b>	<b>Agency</b>	<b>Timeline</b>
<b>Industry Sectors</b>	<ul style="list-style-type: none"> <li>▪ Hi Tech</li> <li>▪ Tourism</li> <li>▪ Film</li> <li>▪ Manufacturing</li> <li>▪ Wood Products</li> <li>▪ Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mailouts</li> <li>▪ Attend sector events</li> <li>▪ Advertising in industry publications</li> <li>▪ Feature articles</li> <li>▪ Personal contacts</li> <li>▪ Industry associations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of mailouts, earned media, contacts</li> <li>▪ 3-6 tradeshow year</li> </ul>	EDO EAC Community champions and industry	<ul style="list-style-type: none"> <li>▪ Summer 2010</li> </ul>
<b>Lower Mainland</b>	<ul style="list-style-type: none"> <li>▪ Vancouver</li> <li>▪ Surrey</li> <li>▪ Langley</li> <li>▪ Burnaby</li> <li>▪ Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▪ Work with and maintain links with other municipalities and regional groups</li> <li>▪ Participate in government and industry events</li> <li>▪ Target industry sectors as above</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of contacts and earned media, and events attended</li> </ul>	EDO EAC Champions and industry	<ul style="list-style-type: none"> <li>▪ Summer 2010</li> </ul>
<b>COMMUNICATIONS</b>					
<b>Target</b>	<b>Specific Targets</b>	<b>Potential Activities</b>	<b>Measureables</b>	<b>Agency</b>	<b>Timeline</b>
<b>Establish a Brand</b>	<ul style="list-style-type: none"> <li>▪ Raise profile</li> <li>▪ Local and external communities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Secure funding</li> <li>▪ Hire consultant</li> <li>▪ Conduct research</li> <li>▪ Community engagement</li> <li>▪ Sponsor a competition</li> </ul>	<ul style="list-style-type: none"> <li>▪ Funding secured</li> <li>▪ Establishment of a brand</li> <li>▪ Community contacts and awareness</li> </ul>	EDO EAC	<ul style="list-style-type: none"> <li>▪ Winter 2011</li> </ul>
<b>Earned Media</b>	<ul style="list-style-type: none"> <li>▪ Local, national, international media outlets</li> <li>▪ Local champions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Issue press releases on community or business events</li> <li>▪ Stage industry tours</li> <li>▪ Invite press to community and business events</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of contacts, articles, and events attended</li> </ul>	EDO EAC Champions and industry	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
<b>Website</b>	<ul style="list-style-type: none"> <li>▪ Maintenance and upgrades</li> </ul>	<ul style="list-style-type: none"> <li>▪ Offer special promotions – e.g. Maple Ridge quiz, coffee with the mayor</li> <li>▪ Profile an industry member monthly</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of hits and businesses profiled</li> </ul>	EDO	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
<b>Trade Shows</b>	<ul style="list-style-type: none"> <li>▪ Industry sector trade shows</li> <li>▪ Host a trade show</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rent a booth</li> <li>▪ Rent booth in conjunction with industry</li> <li>▪ Tour trade shows</li> </ul>	<ul style="list-style-type: none"> <li>▪ 3-6 trade shows per year</li> </ul>	EDO Champions and industry	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>

COMMUNICATIONS					
Target	Specific Targets	Potential Activities	Measurables	Agency	Timeline
<b>Personal Contacts</b>	<ul style="list-style-type: none"> <li>▪ Local business</li> <li>▪ Other communities businesses</li> <li>▪ Government and industry associations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Host visitors</li> <li>▪ Lead delegations</li> <li>▪ Personal visits</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of visitors, delegations, contacts</li> </ul>	EDO, EAC, champions	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>
BUSINESS ENVIRONMENT					
Target	Specific Targets	Potential Activities	Measurables	Agency	Timeline
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>▪ District broadband plan</li> <li>▪ Downtown wireless</li> <li>▪ Transit</li> <li>▪ Industrial parks</li> <li>▪ Downtown revitalization</li> </ul>	<ul style="list-style-type: none"> <li>▪ Implement broadband expansion</li> <li>▪ Expand downtown wireless</li> <li>▪ Improve transit service to new neighborhoods and into Vancouver</li> <li>▪ Encourage development of industrial parks</li> <li>▪ Promote downtown revitalization projects, upgrades, etc.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Secure funding</li> <li>▪ Completion of expansion of broadband and wireless</li> <li>▪ Number new businesses</li> <li>▪ Number of downtown projects</li> </ul>	District BIA EAC Real Estate Board EDO industry	<ul style="list-style-type: none"> <li>▪ Summer 2012</li> </ul>
<b>Champions</b>	<ul style="list-style-type: none"> <li>▪ Industry leaders</li> <li>▪ Community leaders</li> <li>▪ EAC board</li> <li>▪ Mayor and council</li> </ul>	<ul style="list-style-type: none"> <li>▪ Establish program to get community to support, develop champions</li> <li>▪ Ensure champions participate in events, trade shows, etc.</li> <li>▪ Develop database of volunteer champions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of champions</li> <li>▪ Number of events with champions</li> </ul>	EDO EAC Industry and community leaders	<ul style="list-style-type: none"> <li>▪ Ongoing</li> </ul>

