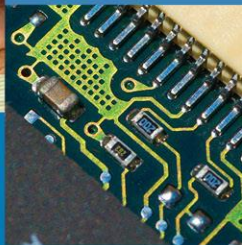
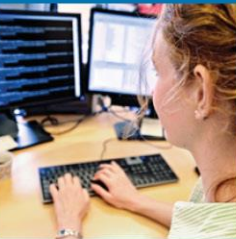


# COLUMBIA BASIN BUSINESS RETENTION & EXPANSION PROJECT

REPORT ON MANUFACTURING  
AND TECHNOLOGY SECTORS

APRIL 2013



# MATS



Manufacturing and Technology Sector Initiative  
*Business Retention and Expansion*



## EXECUTIVE SUMMARY

This report presents findings from a business retention and expansion project that was undertaken as part of the Columbia Basin Manufacturing and Technology Sector (MATS) Initiative. This action-oriented and community-based approach to business and economic development is designed to promote economic growth by helping the Columbia Basin and Boundary Regions understand challenges and opportunities in the manufacturing and technology sectors, and to set priorities for future projects to address those needs.

The Kootenay Association for Science and Technology (KAST) and the Kootenay Rockies Innovation Council (KRIC) undertook a survey, consisting of over 120 questions, of 82 businesses in the manufacturing sector and 97 businesses in the technology sector. Businesses represented communities across the region, spanning Sparwood to the East, Regional District of Kootenay Boundary (RDKB) Area E to the West, Golden to the North and Creston to the South. Opportunities were also sought to work with businesses in Valemount, however, none were found to participate.

Through this process, it was revealed that both the manufacturing and technology sectors within the region have firmly established solid bases of operation and offer tremendous opportunity for further growth and expansion. To aid that growth increased, continual and ongoing communication, cooperation and collaboration between business, government, and economic development agencies will be the catalyst for effective implementation and ongoing economic growth of the sectors.

## RESEARCH FINDINGS

Several key themes emerged during the analysis of survey results. These themes will help guide next steps action planning focused on strengthening the manufacturing and technology sectors in the region.

### *Training*

Respondents in both the manufacturing and technology sectors discussed a lack of certain skills in the regional workforce as a barrier to growth. Marketing/sales and advanced technical skills were identified by both sectors as key training areas. Action areas could focus on ensuring limited training resources are directed to initiatives that benefit a wide variety of businesses, networks are supported to facilitate the further identification of shared training needs, workforce training is incorporated into post-secondary programs, adaptive and flexible training delivery methods are considered, and identified training needs and opportunities are addressed (e.g. marketing / exporting /sales, advanced technical skills, succession planning, government procurement)

### *Regional Promotion*

Promotion of the Columbia Basin Boundary Region both as a place to look for in-demand products and services, and as a place for skilled workers to relocate, factored heavily in respondents' discussions of the regional business climate. This theme was especially predominant in data from the technology sector. Respondents stressed their desire to see a *regional* promotional initiative

rather than disconnected actions by individual organizations and/or communities. Future action could focus on bringing key stakeholders together to identify common messaging and a collaborative approach to promoting the region.

#### *Business Expansion*

Due to the prevalence of respondents planning to expand over the next three years (especially in the East Kootenay sub-region), there will be ongoing opportunities for economic development organizations to support business expansion efforts. A lack of suitable land/facilities and an anti-growth mindset in the community were two commonly-cited barriers to expansion. Future action areas could focus on supporting efforts underway to develop an online, regional site selection tool, raise awareness within the region of how manufacturing and technology sectors contribute to the vitality of the region, and share development process and approval best practices with local governments.

#### *Telecommunications Infrastructure*

Respondents acknowledged that reliable telecommunications infrastructure is essential to doing business in the global economy. Most businesses indicated that telecommunications infrastructure is important to the competitiveness of their business. Respondents in the technology sector, especially, stressed that improvements to broadband would promote economic growth. Along with delivery of infrastructure improvements, it will be important to ensure businesses can access training on how to maximize the business development opportunities that global connectivity offers.

#### *Research and Development*

Data indicate that there are significant opportunities to improve engagement with research and development activities among businesses in the region. Many respondents reported that they spend little or no resources on R&D. The most commonly cited barriers to undertaking R&D (human resources, funding) are difficult for small- and medium-sized businesses to overcome on their own. Future actions could focus on building public-private partnerships to support research and development and raising the awareness of human and financial R&D supports that are currently available to businesses.

#### *Exporting and Buying Local*

Though a large percentage of respondents indicated that they are already successfully selling to international markets, data from many of the smaller or younger businesses suggest that support for export activities may help them, and the regional economy, grow. Future actions could focus on export related training (e.g. identifying export opportunities and improving export readiness), the identification of and access to export markets (e.g. the Canadian Trade Commissioner Service), and creating networking opportunities to help identify opportunities for shared procurement of goods and services that may assist in attracting required suppliers into the region.

#### *Recruitment and Retention*

Many businesses reported challenges both with recruiting and retaining employees; however, a larger percentage of respondents indicated that recruitment has been, and will continue to be, a

barrier to growth for their business. Actions for this theme could focus on the promotion of the region building on lifestyle assets to address recruitment challenges and raising awareness of productivity and human resource planning and development to address retention challenges.

#### *Energy Efficiency*

Awareness of, and commitment to, energy efficiency opportunities is relatively low among respondents, especially in the technology sector. Future actions could focus on raising awareness of the benefits of and supports available to improve energy efficiency.

#### *Business Networking and Collaboration*

Many respondents recognize the benefits that a strong business community can offer its members through networking and collaboration. Yet, in both sectors, networking and collaboration were identified as areas for improvement by respondents. Efforts to facilitate collaboration could lead to indirect action on any of the key themes discussed above, including shared training and R&D opportunities, identification of supply chain linkages, shared procurement, and improvements to export readiness.

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## PROJECT OVERVIEW

### CONTEXT

The Kootenay Association for Science and Technology (KAST) and the Kootenay Rockies Innovation Council (KRIC) promote a strong and diversified regional economy by delivering and supporting initiatives that help businesses enhance their competitiveness through science, technology and innovation. The Manufacturing and Technology Sector Initiative (MATS) is a two- year Columbia Basin Trust initiative supporting economic diversification and development in the Columbia Basin, with a focus on the manufacturing and technology sectors. Delivered in partnership by KAST and KRIC, MATS focuses on the development, retention and expansion of Columbia Basin manufacturing and technology businesses.

MATS activities include:

- conferences, workshops and networking events;
- a Business Retention and Expansion (BRE) Initiative: a business survey aimed at shedding light on current sector strategies for the retention and expansion of Basin businesses;
- a Virtual Incubator where businesses can find mentors and track their progress through business development in an online setting; and
- peer mentoring groups designed specifically to help entrepreneurs address the issues and barriers they experience in building their businesses.

This report, prepared by the Columbia Basin Rural Development Institute (RDI), details findings from the MATS Business Retention and Expansion (BRE) Initiative. BRE is an action-oriented and community-based approach to business and economic development. It promotes job growth by helping communities to learn about the concerns of, as well as opportunities for, local businesses and to set priorities for projects to address these needs. Ultimately, communities will have greater success in attracting new businesses if existing businesses are content with local economic conditions and community support. Business development and job creation are key factors in fostering healthy and vibrant communities—depending on the characteristics of a community's economy, anywhere from 40 to 90 per cent of new jobs come from existing businesses.

### PROJECT OBJECTIVES

Objectives specific to the MATS BRE project were as follows:

1. To provide data on key challenges, issues and opportunities faced by manufacturing and technology businesses in the region.
2. To develop data-supported recommendations regarding important future focus areas for strengthening the region's manufacturing and technology sector.

### DATA SETS

Two sector-specific data sets, representing a total of 177 unique respondents, were used to generate the information included in this report. Two businesses were considered to be part of both the manufacturing and technology sectors and were therefore included in both surveys. Each data set is described below. Additional research considerations are detailed in Appendix A.

### *Manufacturing Sector Data Set*

Eighty-two businesses in the manufacturing sector were surveyed between March and October 2012. Respondents were located in Regional District of Kootenay Boundary (RDKB) Areas C, D and E (6), Grand Forks and Midway (10), Castlegar (2), the Columbia Valley (5), Cranbrook (6), Creston (5), Fernie (4), Golden (2), Kimberley and Marysville (2), Fruitvale (2), Rossland (2), Trail (10), Nakusp and the Slocan Valley (7), Nelson (17) and Revelstoke (2).

### *Technology Sector Data Set*

Ninety-seven businesses in the technology sector were surveyed between March and October 2012. Respondents were located in the Boundary region (1), Castlegar (5), the Columbia Valley (5), Cranbrook (20), Creston (5), Fernie (9), Golden (9), Kimberley (7), Nelson (15) and Greater Trail (21).

## RESEARCH FINDINGS

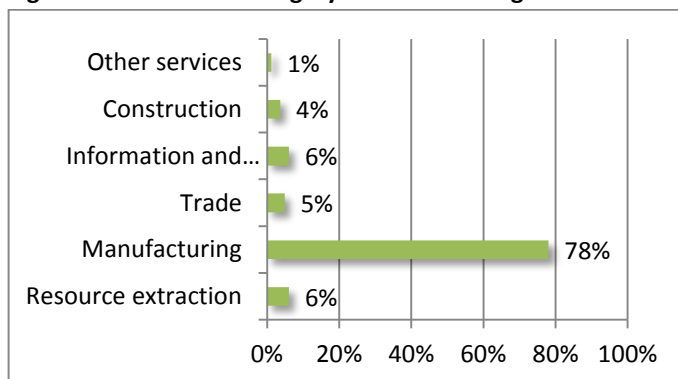
### COMPANY INFORMATION

#### MANUFACTURING SECTOR

##### *Type of Product/Service Offered*

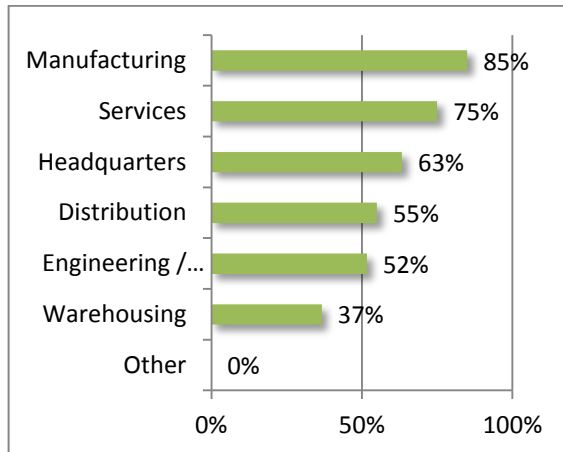
Seventy-eight percent of businesses interviewed were classified as a manufacturing business under the North American Industry Classification System (NAICS). Other companies participating in the manufacturing sector were classified as construction, information and technology, trade and resource extraction businesses.

**Figure 1: NAICS code category - Manufacturing sector**



Eighty-five percent of businesses reported that the function of their facility is related to manufacturing. Seventy-five percent reported that their facility serves a service function and 63% reported that their facility serves as company headquarters.

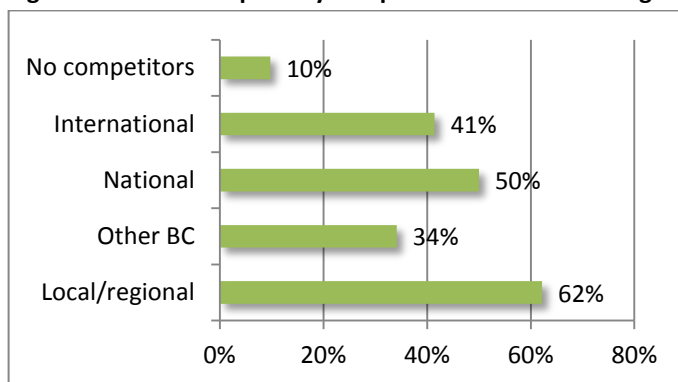
**Figure 2: Function of facility - Manufacturing sector**



### *Competition*

Sixty-two percent of businesses indicated that their primary competitors are located within the region. Another fifty percent indicated that their competitors are located in other provinces.

**Figure 3: Location of primary competitors - Manufacturing sector**



When asked what factors made their company successful, responses were somewhat different based on the respondent's location in either the East or West Kootenay subregion. In the West Kootenay, respondents cited quality and innovative products (14), customer service and reputation (14), experience/length of time in business (11) and proximity to quality supply (10). In the East Kootenay, respondents also noted that quality and innovative products (10) and customer service and reputation (8) are important; however, they cited the location (5) and a lack of competition/high market demand (3) as the third and fourth most important factors.

[illegible]

Some important differences between East and West Kootenay businesses were noted when respondents indicated their life cycle stage. Seventy-five percent of East Kootenay businesses reported that they are in the 'growing' phase, while only 54% of West Kootenay businesses reported the same. Businesses in the 'declining' phase were reported at 0% in the East Kootenay subregion and 5% in the West Kootenay subregion.

### Combined

Stage	Percentage
Declining	4%
Maturing	25%
Growing	59%
Emerging	12%

### East Kootenay

Stage	Percentage
Declining	0%
Maturing	5%
Growing	75%
Emerging	20%

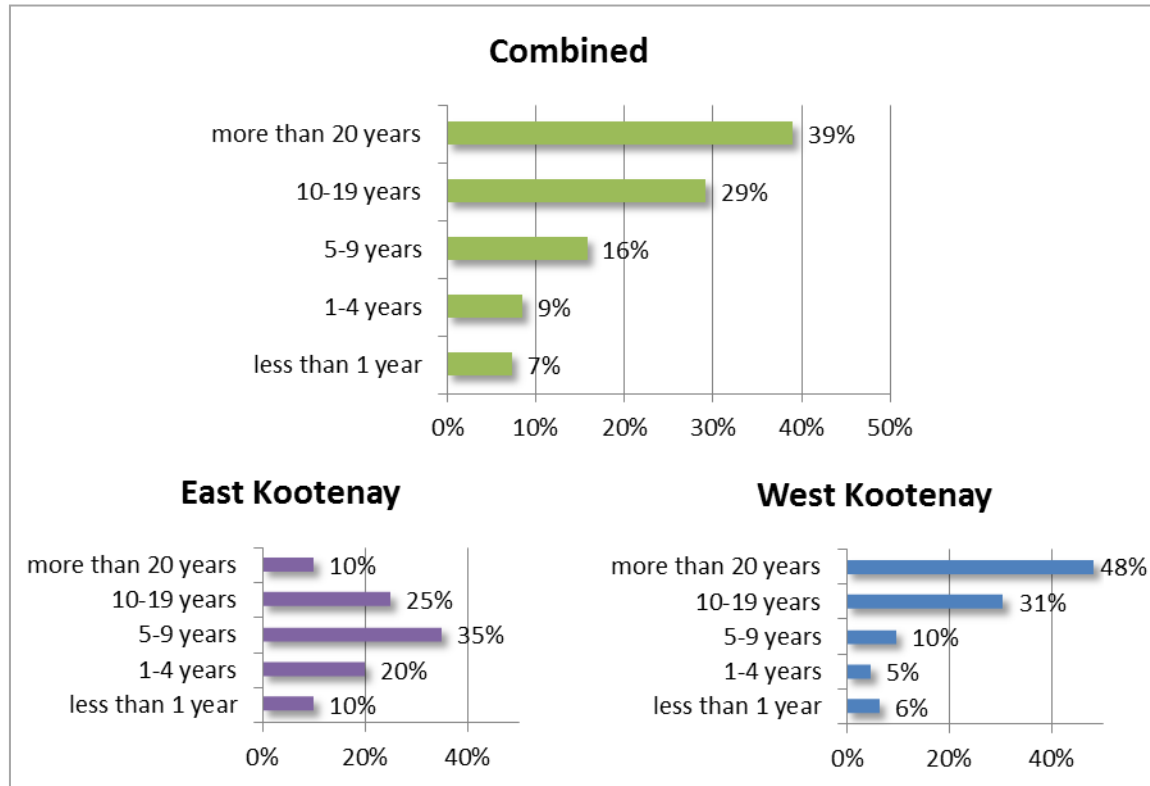
### West Kootenay

Stage	Percentage
Declining	5%
Maturing	31%
Growing	54%
Emerging	10%



Again, some noteworthy differences were observed between East and West Kootenay respondents when they reported on their length of time in business. West Kootenay businesses are generally older, with 48% reporting that they had been in business for more than 20 years. Only 10% of East Kootenay businesses reported the same.

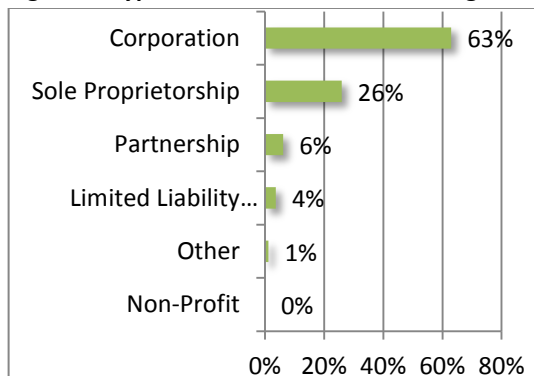
**Figure 6: Length of time in business - Manufacturing sector**



### *Ownership and Management*

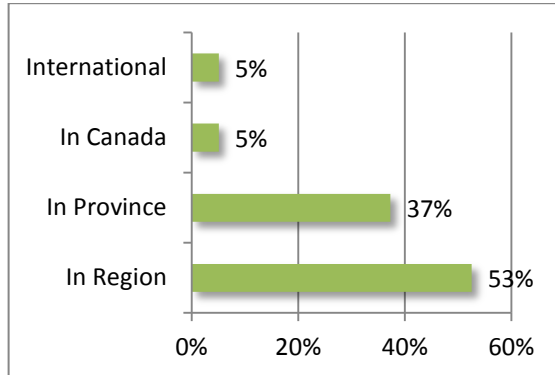
The vast majority of respondents indicated that their business is privately owned (91%), with 63% registered as a corporation, 23% registered as a sole proprietorship, 6% registered as a partnership and 4% registered as a limited liability partnership.

**Figure 7: Type of business - Manufacturing sector**



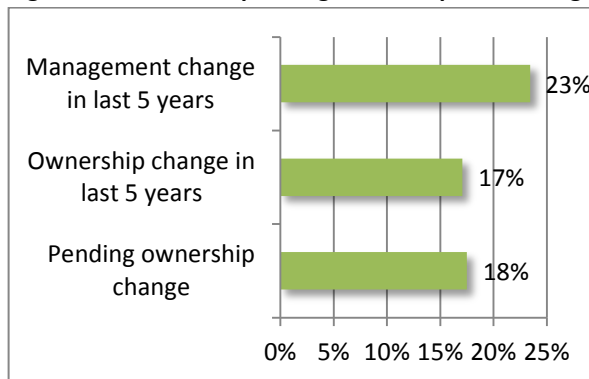
Fifty-three percent of businesses reported that their headquarters are located within the region. Another 37% reported that their headquarters are located elsewhere in British Columbia. Eight percent and 9% indicated that their parent company has additional Canadian and international locations (that provide similar products/services), respectively.

**Figure 8: Location of headquarters - Manufacturing sector**



Almost a quarter (23%) of respondents indicated that their business has seen a change in management in the last five years. Of those respondents, all but one reported that the change has had a positive impact on the business. Seventeen percent of respondents indicated that their business has seen an ownership change in the last five years and, again, all but one reported that the change has had a positive impact. Eighteen percent of businesses indicated that a change of ownership is pending. Of those respondents, 8% expect the change to happen within a year, 42% expect the change to happen within 2 years, and 50% expect the change to take 3 years or more.

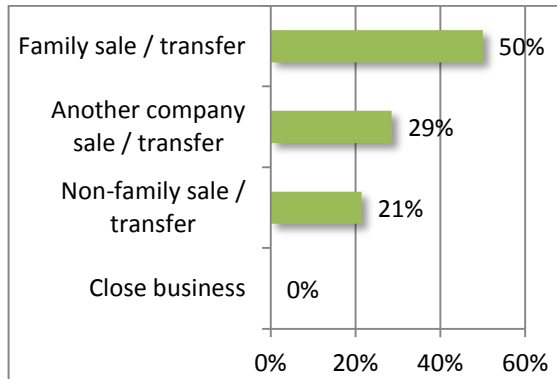
**Figure 9: Recent and pending ownership and management changes - Manufacturing sector**



### *Succession and Business Plans*

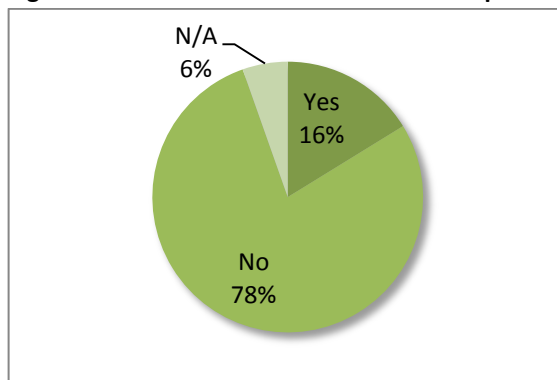
Of the eighteen percent of businesses that anticipate an ownership change in the near future, 50% intend to sell or transfer the business to a family member, 21% intend to sell or transfer the business to another non-family individual and 29% intend to sell to another business. Importantly, no respondents expect to close the business.

**Figure 10: Anticipated exit strategy - Manufacturing sector**



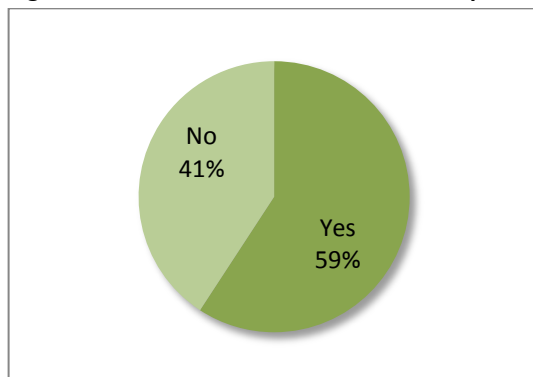
A relatively small percentage of respondents – only 16% – reported that their business has a formal succession plan in place. Twenty nine percent, however, reported that they have identified a successor for the business. Five businesses have received assistance in developing their succession plan from a lawyer (1), business partner (1), spouse (1), a Canadian Federation of Independent Businesses guide (1) or accountant (1).

**Figure 11: Existence of a formal succession plan - Manufacturing sector**



Respondents' participation in business planning was higher than that for succession planning. Fifty-nine percent of respondents indicated that they have a current business plan in place.

**Figure 12: Existence of a current business plan - Manufacturing sector**

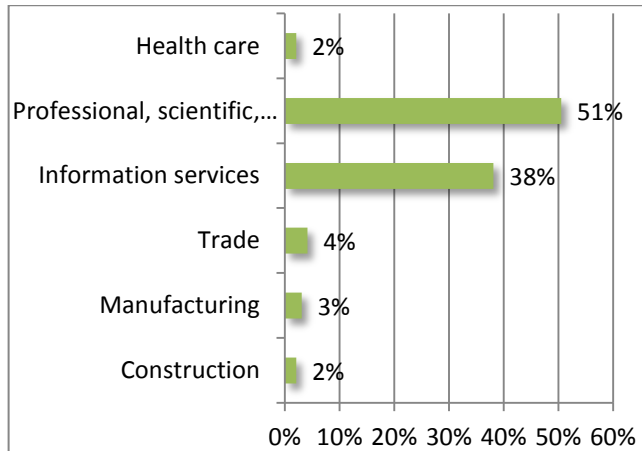


## TECHNOLOGY SECTOR

### *Type of Product/Service*

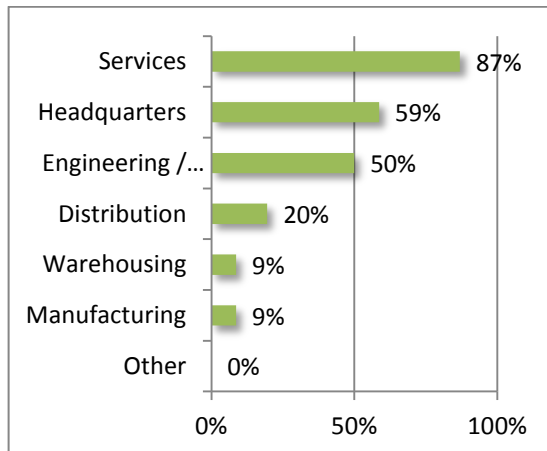
Fifty-one percent of businesses interviewed were classified as professional, scientific and technical service-providing businesses under the NAICS system. Another 38% were classified as businesses that provide information services.

**Figure 13: NAICS code category - Technology sector**



Eighty-seven percent of businesses interviewed reported that the primary function at their facility is service provision. Fifty-nine percent also indicated that their facility serves as company headquarters and another 50% indicated that their facility performs engineering or an R&D function.

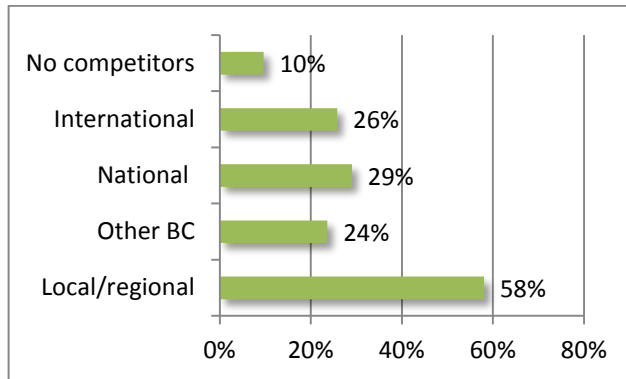
**Figure 14: Function of facility - Technology sector**



### *Competition*

Fifty-eight percent of businesses indicated that their primary competitors are located within the Columbia Basin Boundary region. Another 29% indicated that their competition primarily stems from businesses located in other provinces.

**Figure 15: Location of primary competitors - Technology sector**



When asked what factors make their company successful, responses from West Kootenay and East Kootenay businesses differed slightly. In the West, the four most common responses were customer service/reputation (17), partnerships (10), lack of competition/high market demand (7) and experience/length of time in business (6). In the East, the four most common responses were customer service/reputation (19), lack of competition/high market demand (12), experience/length of time in business (11) and quality/innovation (8). The importance of reputation is supported by the following excerpt from one business' survey data:

*"The number one factor is referrals. 100% of their new business comes from referrals. People are happy with the service and most come back and buy more services".*

**Figure 16: Key words in respondents' assessment of success factors - Technology sector**

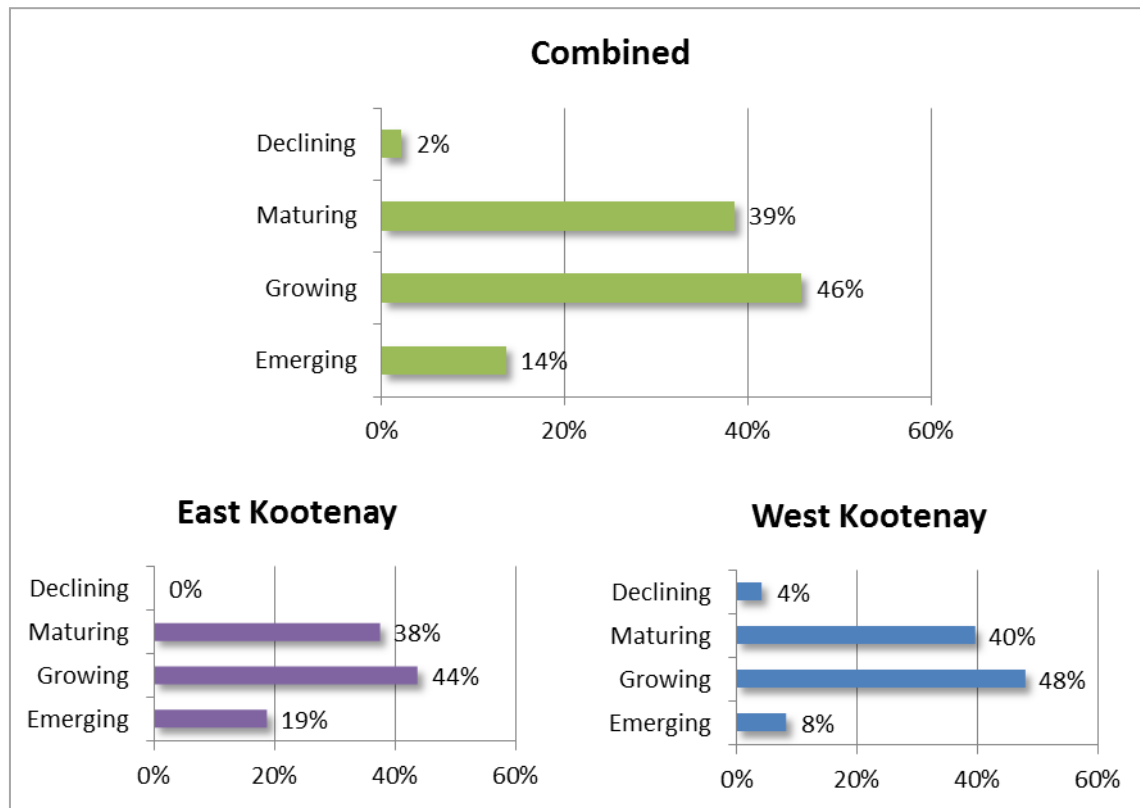


### *Age and Lifecycle stage*

East and West Kootenay businesses reported a similar distribution of lifecycle stages with a notable exception in the 'declining' phase. Four percent of West Kootenay businesses indicated that they are in the 'declining' phase while no East Kootenay businesses reported the same. Across

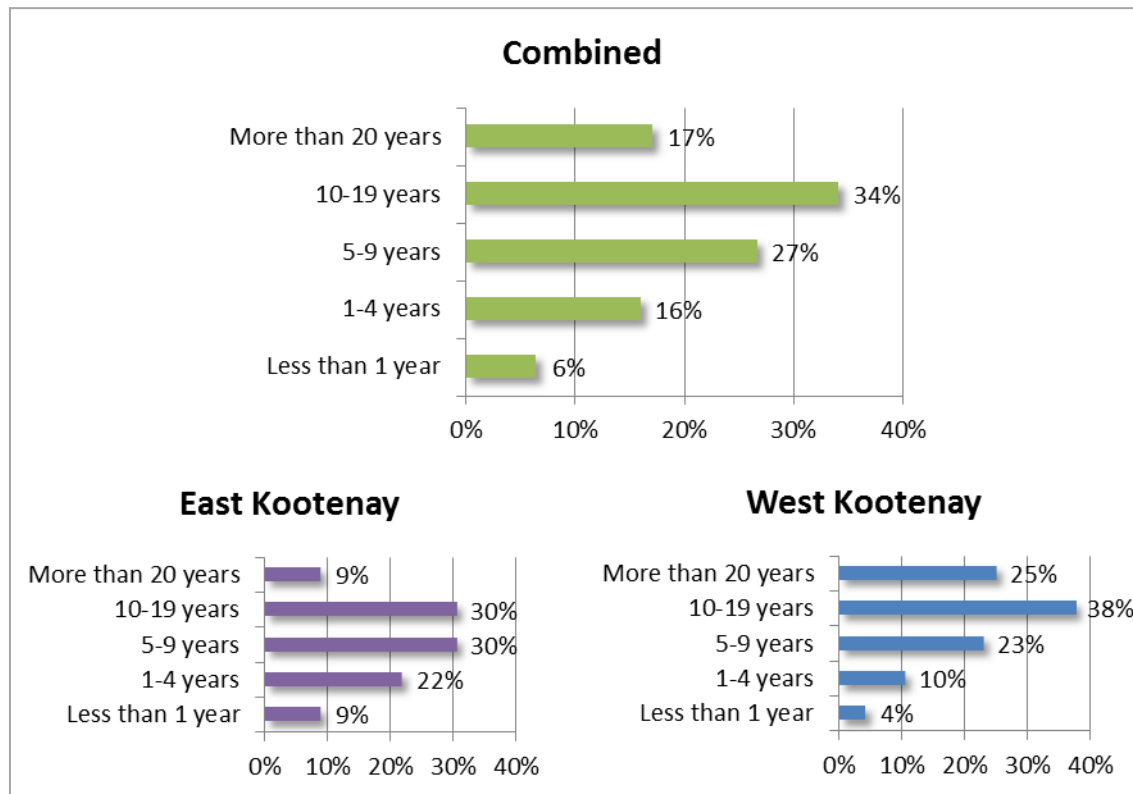
all businesses, 46% indicated that they are in the 'growing' phase and 39% indicated that they are in the 'maturing' phase.

**Figure 17: Lifecycle stage of businesses - Technology sector**



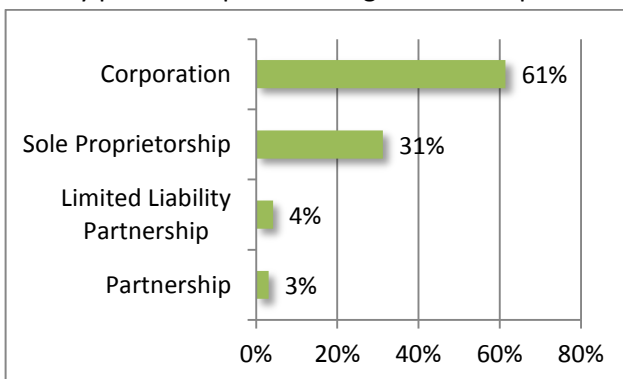
When reporting on the length of time in business, some noteworthy differences were observed between East and West Kootenay businesses. West Kootenay businesses are generally older, with 25% reporting that they have been in business for more than 20 years. Only 9% of East Kootenay businesses reported the same. As a region, 34% of businesses have been in business for between 10 and 19 years. Twenty-seven percent of businesses are five to nine years old.

**Figure 18: Length of time in business - Technology sector**



### *Ownership and Management*

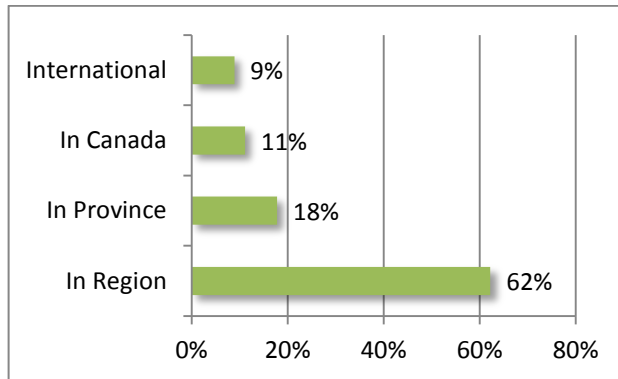
The vast majority (93%) of respondents indicated that their business is privately owned, with 61% registered as a corporation, 31% registered as a sole proprietorship, 4% registered as a limited liability partnership and 3% registered as a partnership.



**Figure 19: Type of business - Technology sector**

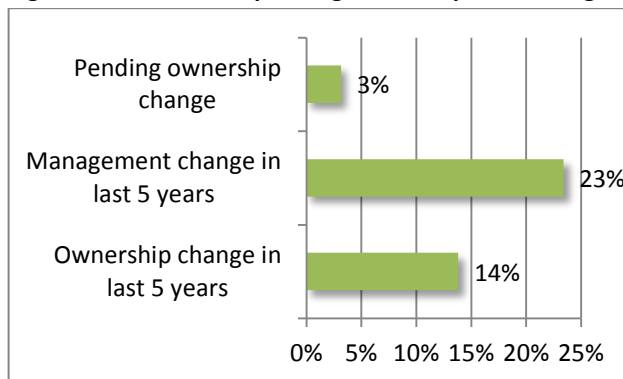
Sixty-two percent of respondents indicated that their headquarters are located within the region. Another 18% indicated that their headquarters are located elsewhere in BC. Thirty percent and 22% of businesses stated that their parent company has other Canadian and international locations (that provide similar products/services), respectively.

**Figure 20: Location of headquarters - Technology sector**



Almost a quarter (23%) of respondents indicated that their business has seen a change in management in the last five years. The vast majority of those respondents (86%) stated that the change has had a positive impact on the business. Fourteen percent of respondents indicated that their business has seen a recent change in ownership. Of those respondents, seventy-seven percent believed that the change has had a positive impact. Only 3% of businesses indicated that a change in ownership is pending. Of those respondents, 1 reported that the change will occur in approximately 2 years' time and 2 reported that the change will occur in 3 or more years.

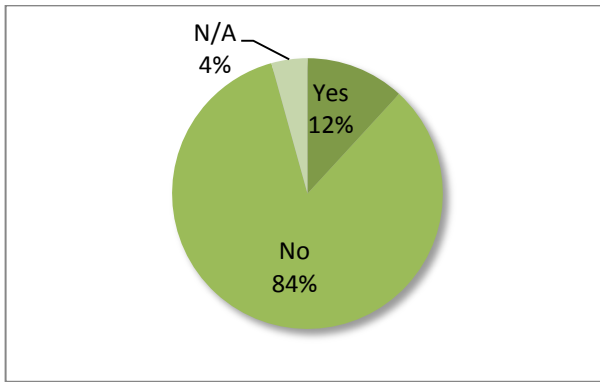
**Figure 21: Recent and pending ownership and management changes - Technology sector**



#### *Succession and Business Plans*

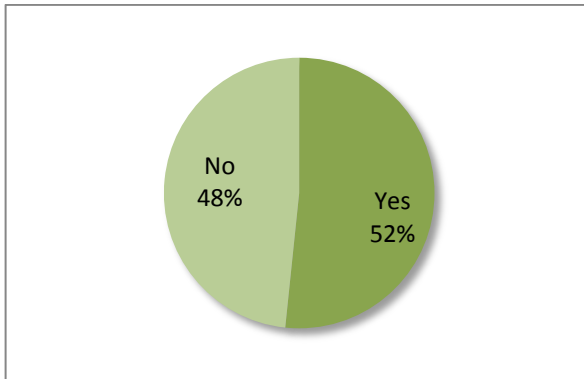
Only 9% of technology businesses surveyed have identified a successor and 12% have established a formal succession plan. Four businesses have been assisted with developing their succession plan through consultants (2 respondents) or a KAST mentorship program (2 respondents).





**Figure 22: Existence of a formal succession plan - Technology sector**

Respondents' participation in business planning is higher than that for succession planning. Fifty-two percent of businesses indicated that they have a current business plan.



**Figure 23: Existence of a current business plan - Technology sector**

### COMPARISON OF SECTORS

Data from the 'Company Information' module of the BRE survey revealed some noteworthy differences between businesses in the manufacturing and technology sectors.

When reflecting on the factors that make their companies successful, manufacturing businesses considered quality and innovation to be the most important. In the technology sector, however, respondents believed that customer service/reputation is the most important factor.

The life cycle of businesses display higher sub-regional variation in the manufacturing sector than in the technology sector. A considerable difference of 21 percentage points separates East (75%) and West Kootenay (54%) manufacturing businesses that are in the 'growing' life cycle phase. In the technology sector, that difference is much smaller, at only 4 percentage points. Similarly, a difference of 26 percentage points separates East (5%) and West Kootenay (31%) manufacturing businesses in the 'maturing' life cycle phase. In the technology sector, that difference is only 3%.

Data indicate that technology businesses in the Columbia Basin Boundary region are generally younger than manufacturing businesses. Fifty-one percent of surveyed technology companies have been in business for more than 10 years, including only 17% that are more than 20 years old.

In the manufacturing sector, 68% of companies have been in business for more than 10 years, including 39% that are more than 20 years old.

Businesses in the technology sector display stronger links to national or international parent companies. Thirty percent of technology companies reported that their parent company has other locations that produce similar products or services elsewhere in Canada. Only 8% of manufacturing companies reported the same. Twenty-two percent of technology companies reported that their parent company owns similar facilities in other countries. Only 9% of manufacturing companies reported the same.

Data indicate that local manufacturing sector businesses are more engaged in planning processes than their counterparts in the technology sector. Fifty-nine percent of manufacturing businesses have a current business plan as compared to 52% of businesses in the technology sector. Twenty-nine percent of respondents in the manufacturing sector have identified a successor for their business, while only 9% of respondents in the technology sector have done the same.

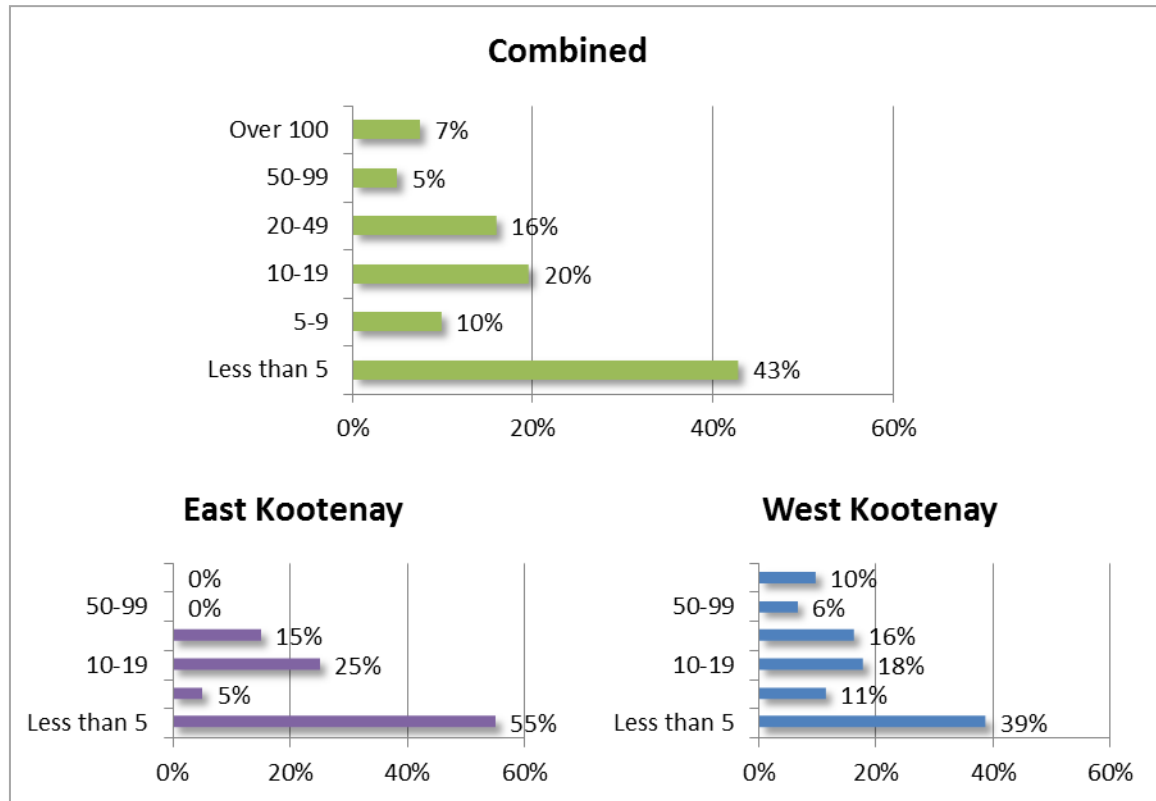
## LOCAL WORKFORCE

### MANUFACTURING SECTOR

#### *Size of Workforce*

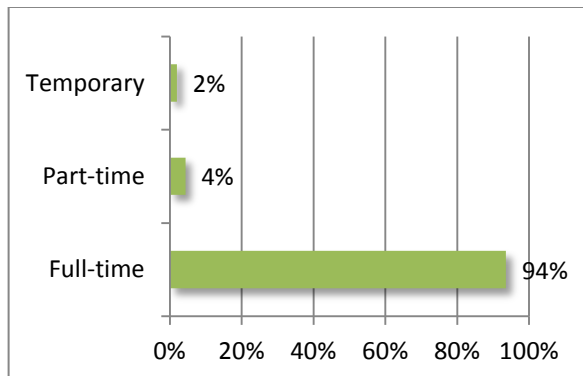
The 82 manufacturing businesses interviewed reported a total of 3,579 employees. In general, West Kootenay businesses indicated that they employ a higher number of people than East Kootenay businesses. Sixteen percent of West Kootenay businesses reported employing over 50 people, while 0% of East Kootenay businesses reported the same. Across the region, the most common number of employees is less than 5, with 43% of respondents indicating that their business fits in that category.

**Figure 24: Total number of employees - Manufacturing sector**



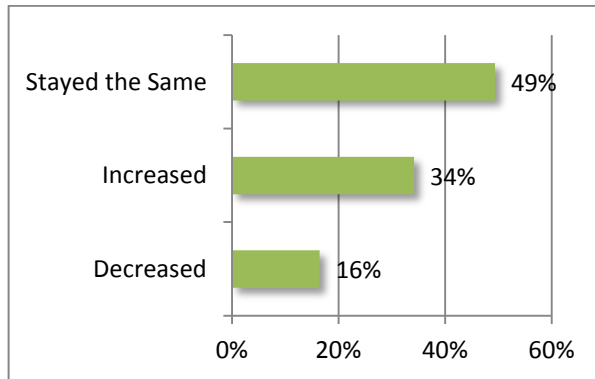
Ninety-four percent of positions at surveyed businesses are full-time. Another 4% are part time and 2% are temporary.

**Figure 25: Nature of employment - Manufacturing sector**



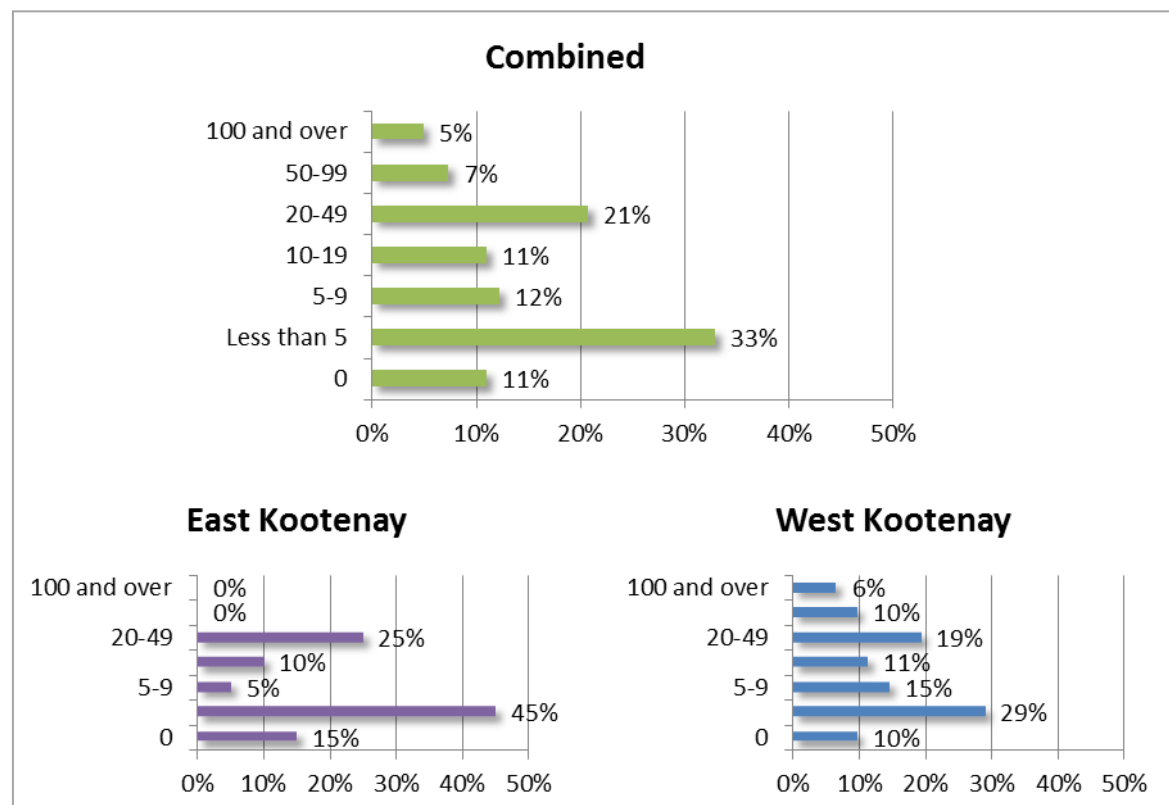
Forty-nine percent of businesses reported that the number of employees at their facility is the same as it was 10 years ago. Another 34% of businesses indicated that employment has increased over the same time period.

**Figure 26: Employment trend over last 10 years - Manufacturing sector**



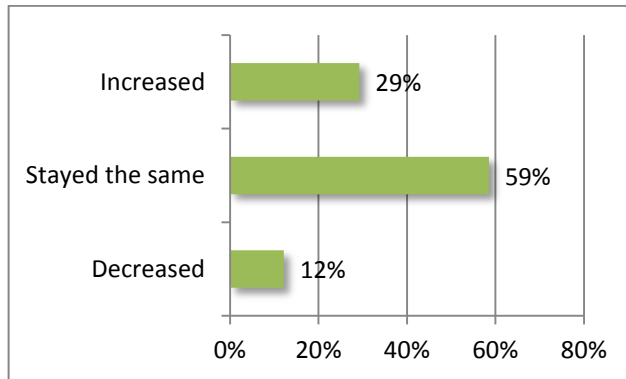
The number of employees at businesses interviewed, especially those that are medium-sized, is generally expected to grow over the next 3 years. The number of businesses with 10-19 employees is expected to drop over the next three years (20% at present vs. 11% in three years) while the number of businesses with 20-49 employees is expected to grow (16% at present vs. 21% in three years). Data suggest that the trend of bigger businesses in the West Kootenay subregion as compared to the East Kootenay subregion will continue.

**Figure 27: Projected number of employees in 3 years - Manufacturing sector**



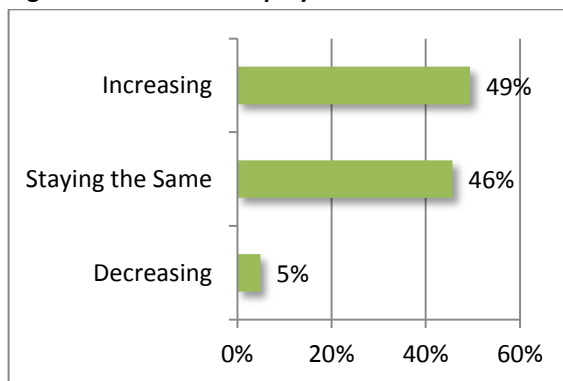
Twenty-nine percent of respondents reported that the size of their full-time workforce has increased over the last 3 years, while 59% indicated that it has stayed the same size.

**Figure 28: Full-time employment trend over last 3 years - Manufacturing sector**



Forty-nine percent of respondents expect that the size of their full-time workforce will increase over the next three years, while another 46% expect that it will stay the same size.

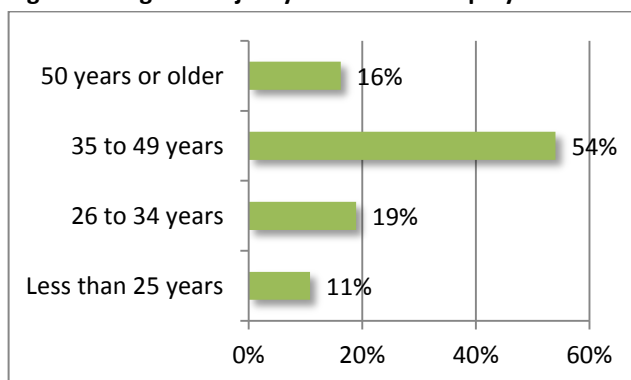
**Figure 29: Full-time employment trend over next 3 years - Manufacturing sector**



### *Workforce Demographics*

Fifty-four percent of respondents indicated that the majority of their essential employees are between 35 and 49 years old. Another 19% reported that most of their essential employees are between 26 and 34 years of age.

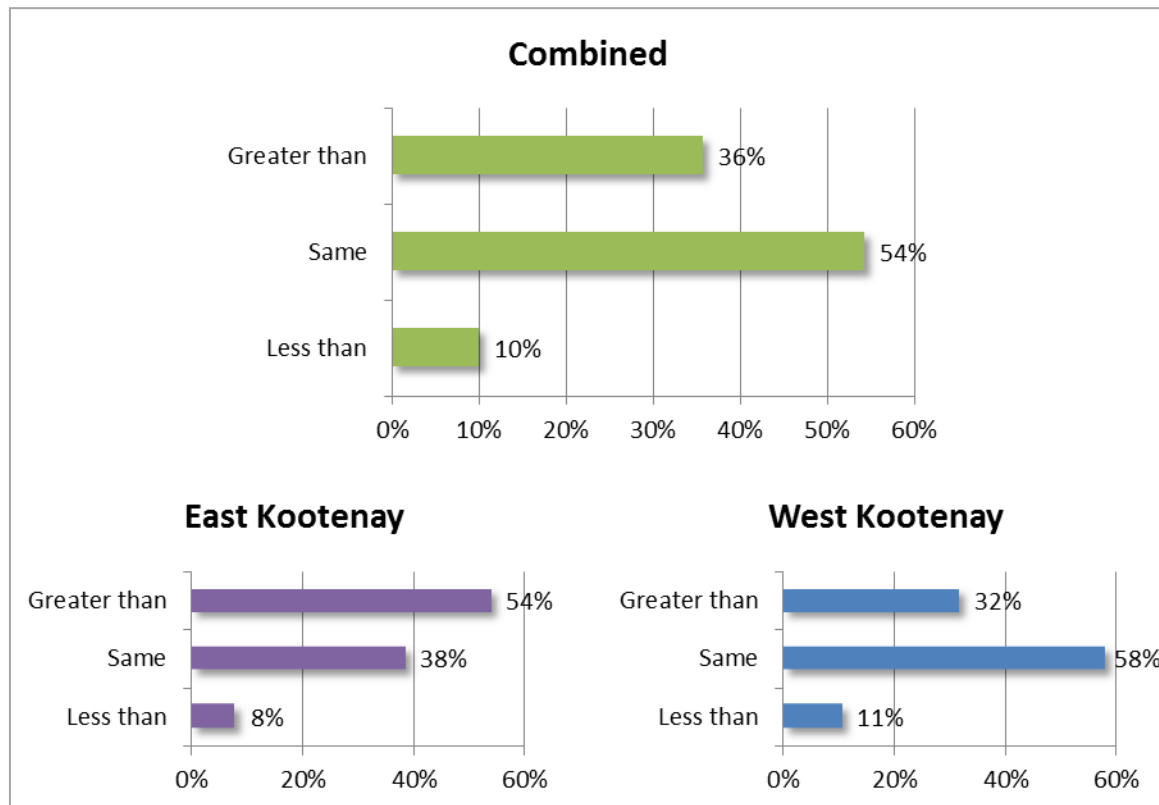
**Figure 30: Age of majority of essential employees - Manufacturing sector**



### Wages

When reporting on average wage for skilled workers or professionals, the highest number of employers stated they pay between \$20 and \$29 per hour. For semi-skilled workers and entry-level workers, the most common responses were under \$20 and \$10-\$12, respectively. Interviewees at most East Kootenay businesses (54%) believe that their company pays higher average wages than other businesses in the region. In the West Kootenay subregion, most respondents (58%) believe that their business pays about the same as others in the region.

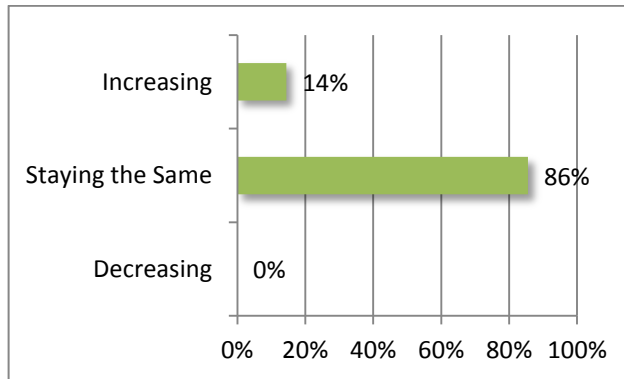
**Figure 31: Wage in relation to other businesses in the region - Manufacturing sector**



### Recruitment and Retention

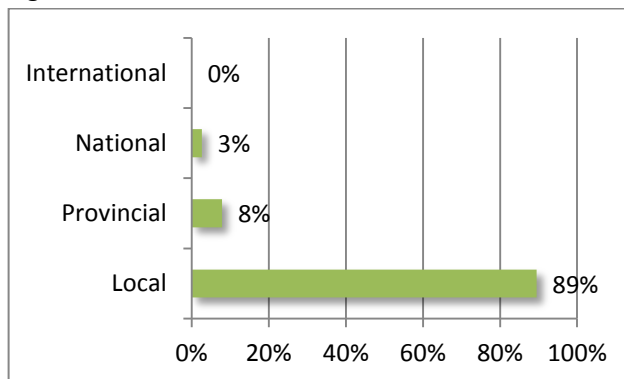
Most respondents (85%) agreed that the number of unfilled positions at their company is remaining relatively constant.

**Figure 32: Trend in unfilled positions - Manufacturing sector**



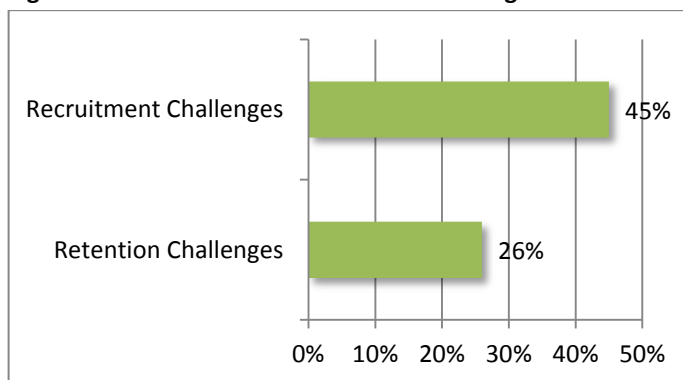
The vast majority of surveyed businesses (89%) indicated that they recruit their workforce from local communities. Some (8%) reported that they primarily recruit provincially, while a small number (3%) reported that they recruit nationally.

**Figure 33: Location of workforce recruitment - Manufacturing sector**



Forty-five percent of businesses interviewed indicated that they have experienced challenges recruiting new employees and 26% of businesses indicated that they have experienced challenges retaining existing employees.

**Figure 34: Recruitment and retention challenges - Manufacturing sector**



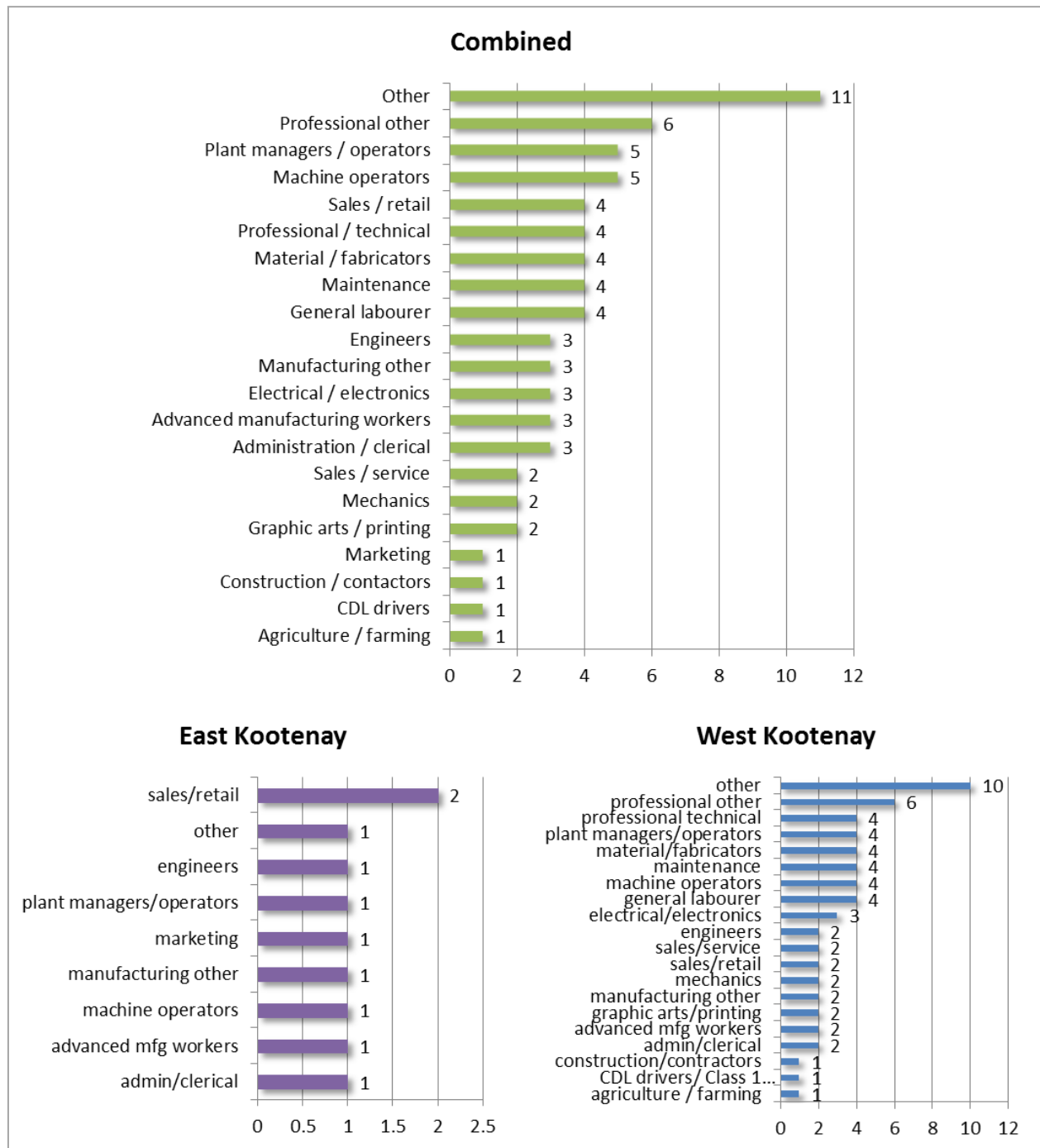
When asked what efforts businesses have undertaken to retain employees, 22 respondents indicated that they have focused on offering competitive wages and benefits, 9 indicated that they





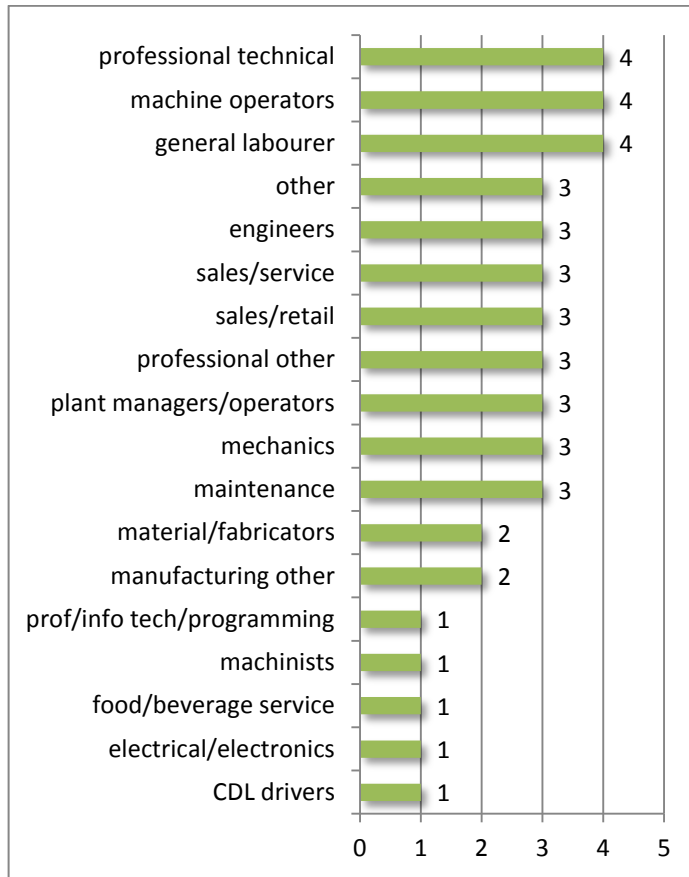
The most important current recruitment areas among surveyed businesses include plant managers/operators (5 respondents) and machine operators (5 respondents). Recruitment challenges vary somewhat across the East and West Kootenay subregions. Among East Kootenay businesses, the most common recruitment challenge is in sales/retail positions (2 respondents), while among West Kootenay businesses, technical professionals are in the highest demand (4 respondents). Responses included in the 'other' and 'professional other' categories illustrated in the graph below include skilled trades workers, railworkers, certified accountants, shippers, communications specialists, drafters/designers and managers/project managers.

**Figure 37: Current recruitment areas - Manufacturing sector**



Forty-nine percent of respondents anticipate future recruitment challenges in one or more professions. Most significant amongst these professions are technical professionals (4 respondents), machine operators (4 respondents) and general labourers (4 respondents).

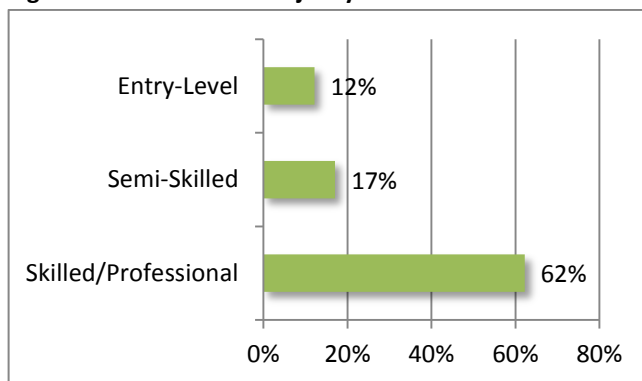
**Figure 38: Future recruitment areas - Manufacturing sector**



### *Skills and Training*

Most businesses (62%) indicated that the majority of their workforce is mostly skilled and/or professional. Seventeen percent reported that the majority of their workforce is semi-skilled and the remainder (12%) employ primarily entry-level employees.

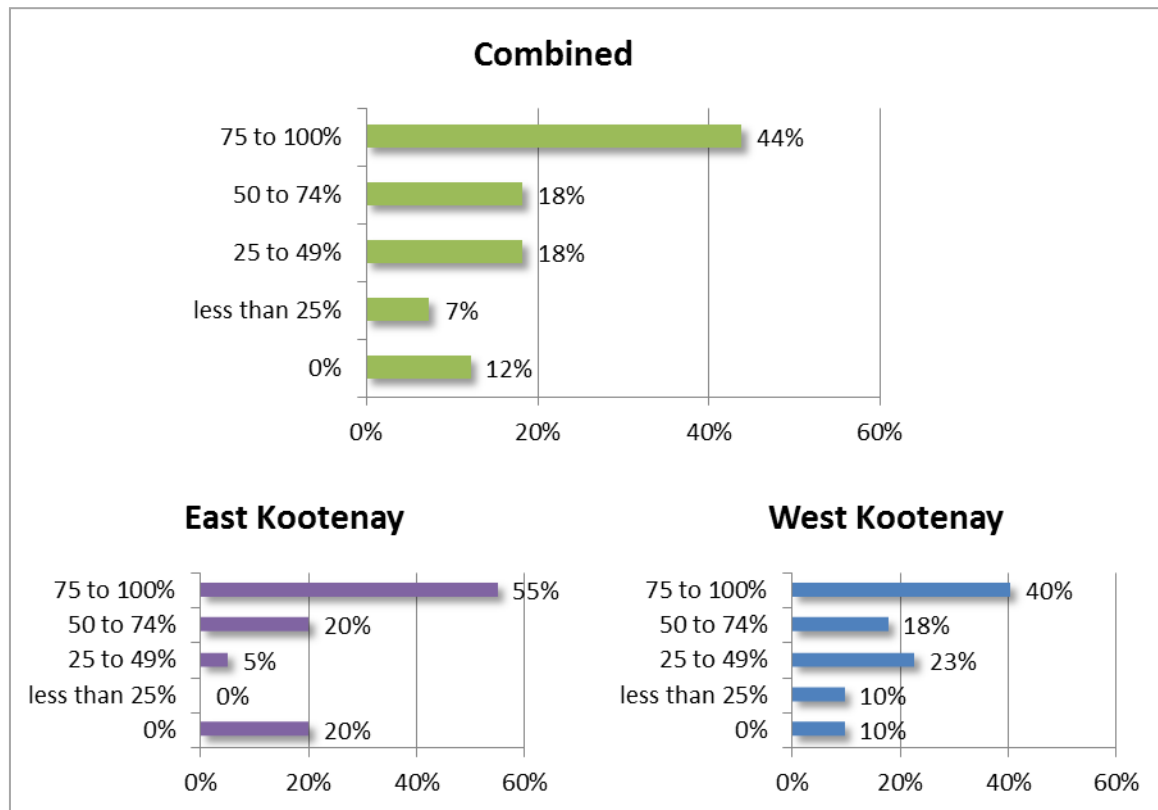
**Figure 39: Skill level of majority of workforce - Manufacturing sector**



The presence of skilled or professional workers in the workplace appears to be more polarized in the East Kootenay subregion than in the West Kootenay subregion. A higher number of East Kootenay businesses (55% as compared to 40% of West Kootenay businesses) reported that over 75% of their workforce is skilled or professional. At the same time, a higher percentage of East

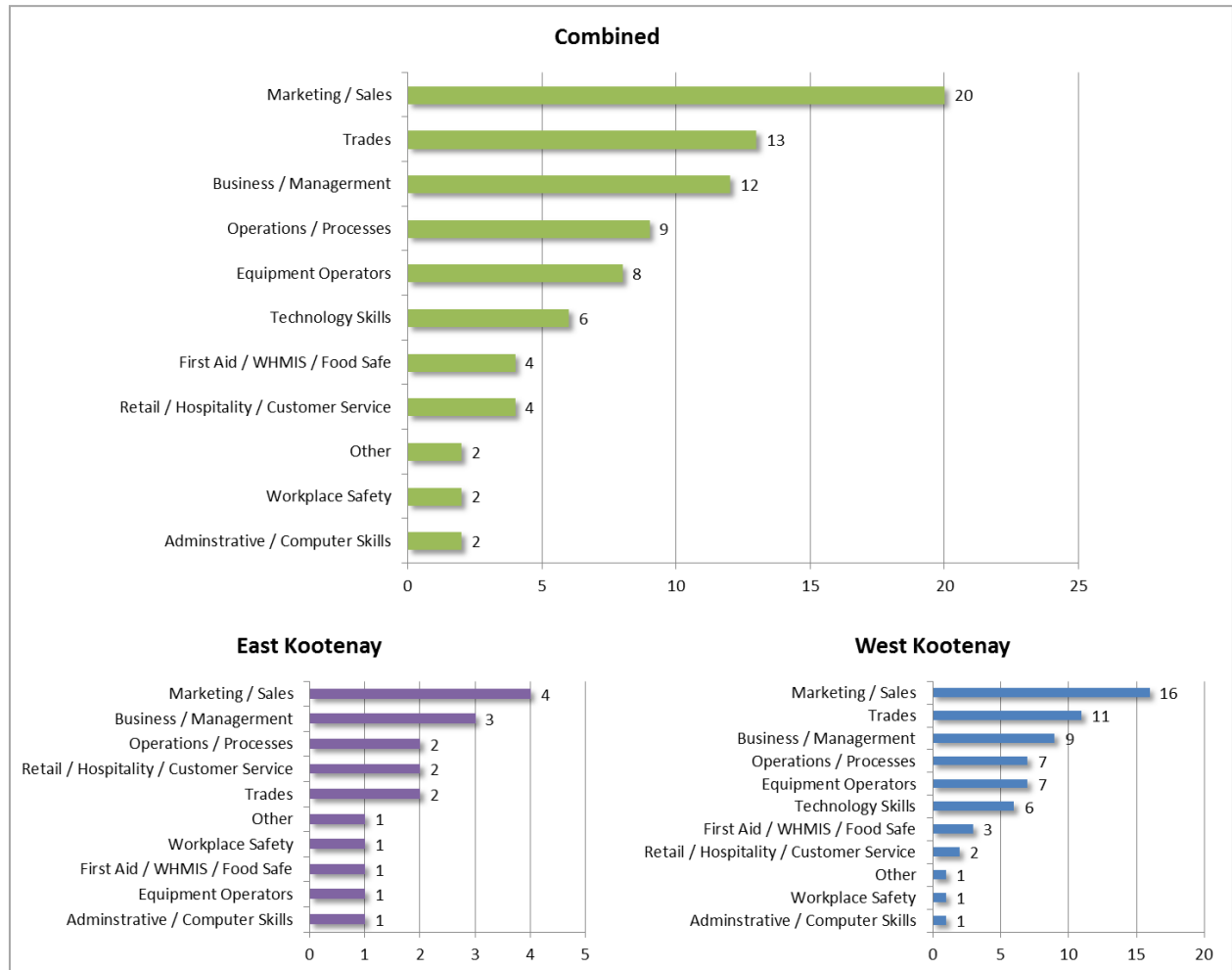
Kootenay businesses (20% as compared to 10% of West Kootenay businesses) reported that 0% of their workforce is comprised of skilled or professional workers.

**Figure 40: Skilled or professional component of workforce - Manufacturing sector**



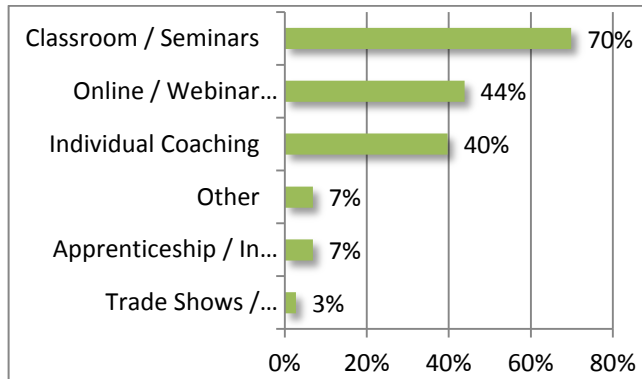
Seventy-one percent of respondents indicated that there are areas of professional development or training that would be of benefit to their employees. Of these respondents, 20 identified marketing /sales as a priority training area and 13 identified specialized skills training as important. Both subregions acknowledged the value of marketing /sales training as well as business/management training. Specialized skills training was ranked second most important among West Kootenay respondents but only fifth most important in the East Kootenay subregion.

**Figure 41: Training and professional development needs - Manufacturing sector**



The majority of respondents (62%) stated that they typically undertake training activities that are held locally. Forty-three percent stated that they will travel to other areas in BC for training or professional development. Seventy percent of respondents indicated that they prefer to attend in-person classroom or seminar-style training sessions. Forty-four percent said that they believe online webinar-style training events are a preferable mode of training. Forty percent of respondents also believed that individual coaching is effective, while only a few preferred apprenticeships or conferences.

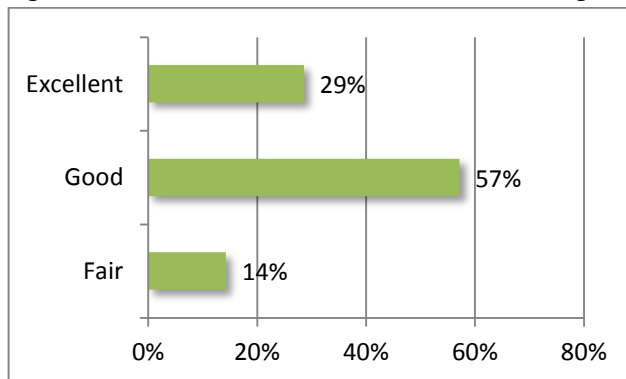
**Figure 42: Preferred modes of training - Manufacturing sector**



### *Unions*

Seven businesses (9%) reported that they have union status. The majority of these respondents indicated that the status of labour relations is currently good.

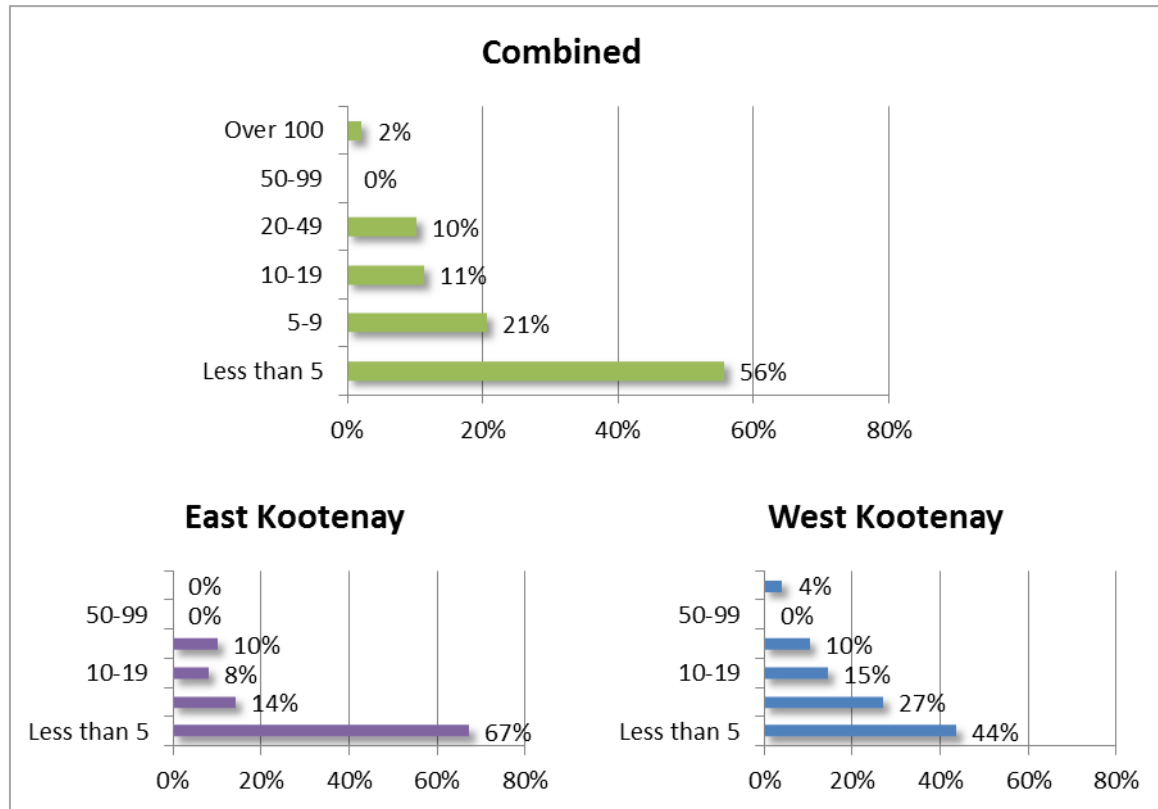
**Figure 43: Status of labour relations - Manufacturing sector**



### **TECHNOLOGY SECTOR**

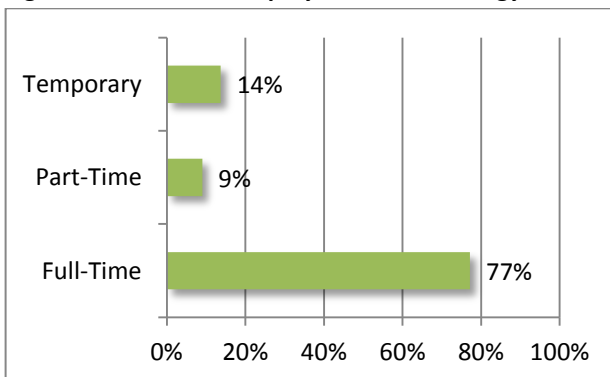
The 97 technology businesses interviewed reported a total of 916 employees. In general, West Kootenay businesses indicated that they employ a higher number of people than East Kootenay businesses. Four percent of West Kootenay businesses employ over 100 people as compared to 0% in the East Kootenay subregion. Forty-four percent of West Kootenay businesses employ less than 5 people as compared to 67% in the East Kootenay subregion.

**Figure 44: Total number of employees - Technology sector**



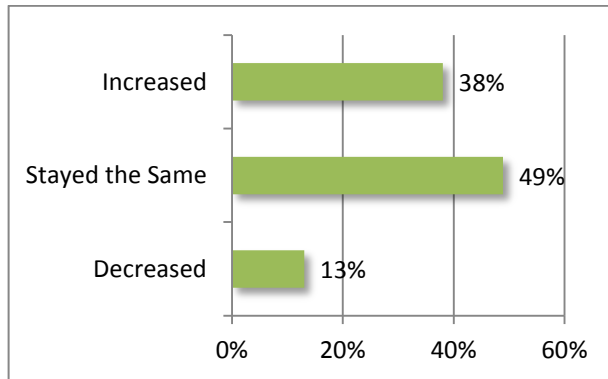
Seventy-seven percent of positions at interviewed businesses are full-time. Another 9% are part-time and 14% are temporary.

**Figure 45: Nature of employment - Technology sector**



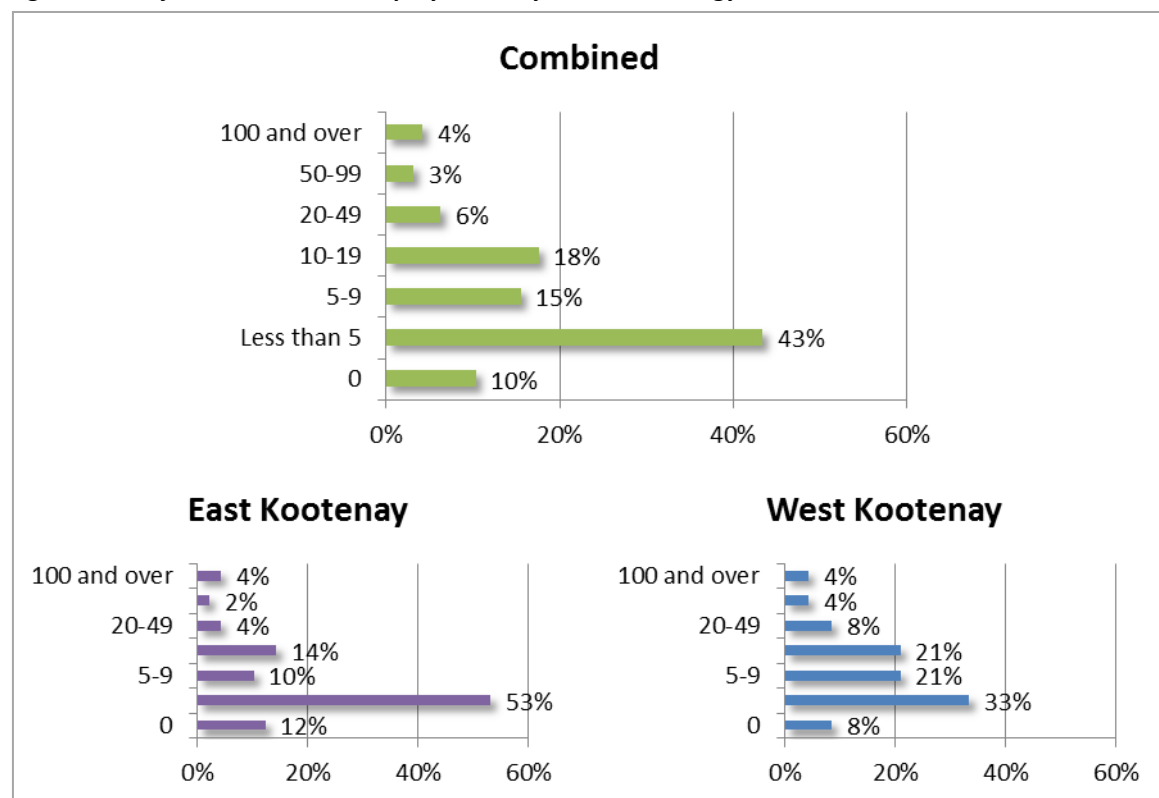
Forty-nine percent of businesses reported that the number of employees at their facility is the same as it was 10 years ago. Another 38% of businesses indicated that employment has increased over the same time period.

**Figure 46: Employment trend over the last 10 years - Technology sector**



Employment at interviewed businesses is generally expected to grow over the next three years, especially at larger businesses. In the East Kootenay subregion, 6% of businesses expect to have 50 or more employees (as compared to 0% at present) and in the West Kootenay, 8% of businesses expect to have over 50 employees (as compared to 4% at present).

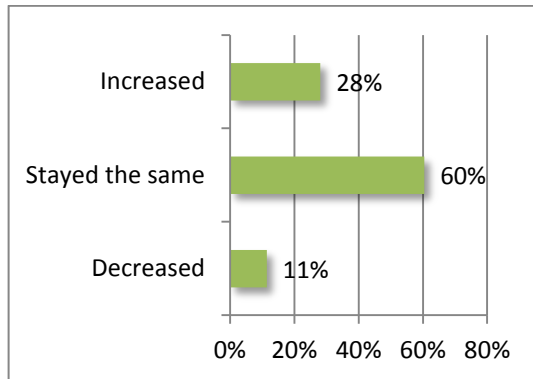
**Figure 47: Projected number of employees in 3 years - Technology sector**



Twenty-eight percent of respondents reported that the size of their full-time workforce has increased over the last 3 years while 60% indicated that it has stayed the same size.

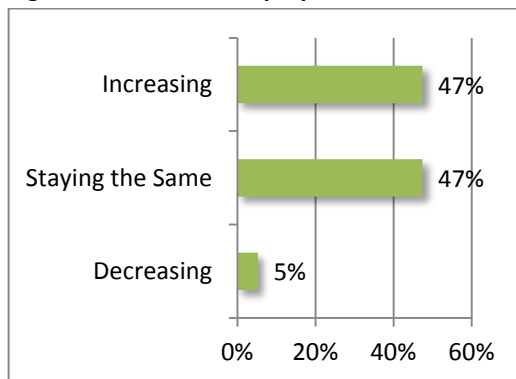


**Figure 48: Full-time employment trend over last 3 years - Technology sector**



Forty-seven percent of respondents expect the size of their full-time workforce to increase in size over the next 3 years. An additional 47% expect that it will stay the same size. A small number of respondents (5%) expect the size of their full-time workforce to decrease over the next 3 years.

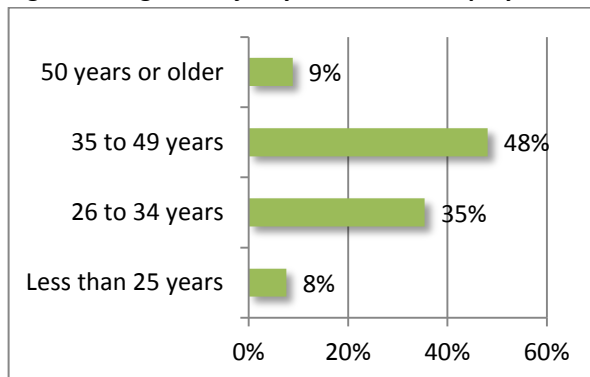
**Figure 49: Full-time employment trend over next 3 years - Technology sector**



### *Workforce Demographics*

Forty-eight percent of respondents indicated that the majority of their essential employees are between 35 and 49 years old. Another 35% reported that most of their essential employees are between 26 and 34 years of age.

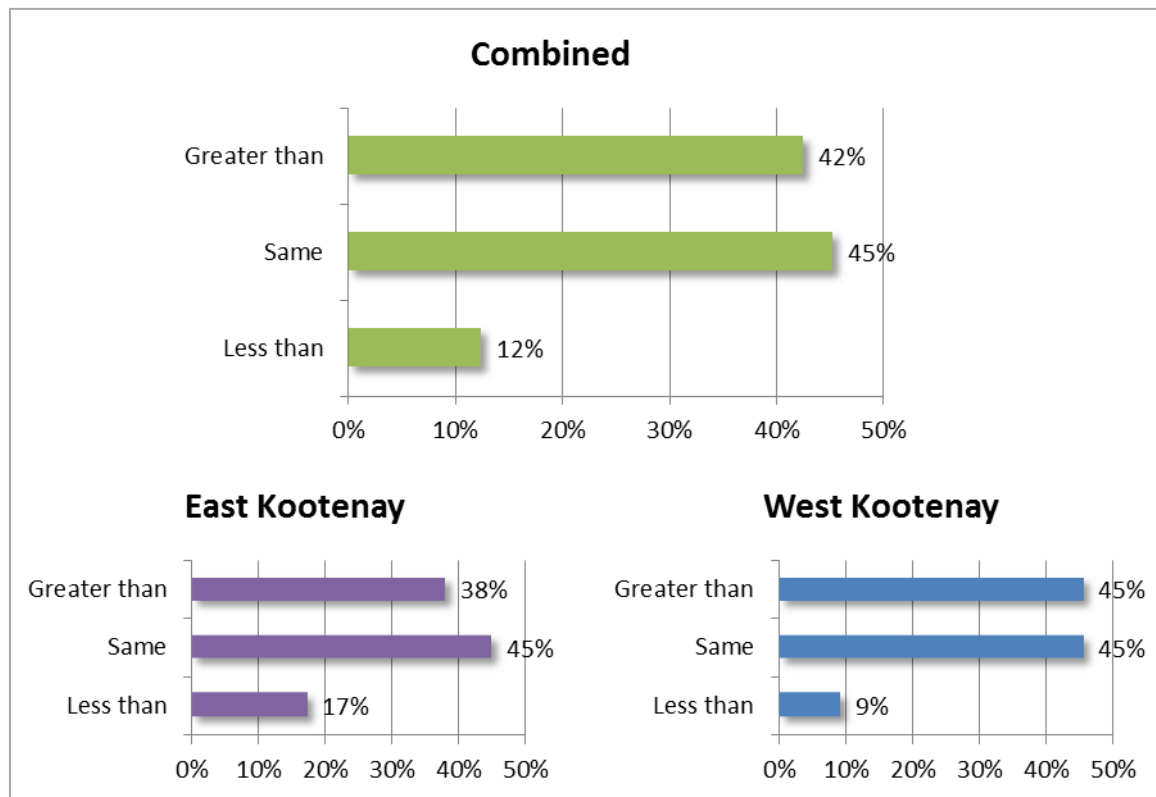
**Figure 50: Age of majority of essential employees - Technology sector**



### Wages

When reporting on average wage for skilled workers or professionals, the highest number of respondents stated they pay \$30 to \$49 per hour. For semi-skilled workers, the most common response was under \$20. Forty-five percent of businesses believed that their company pays about the same wage as other employers in the region. Another 42% believed that their company pays higher average wages than other regional businesses. Wages appear to be slightly higher in the West Kootenay subregion. Forty-five percent of West Kootenay respondents stated that they pay higher wages than other regional businesses while only 38% of East Kootenay respondents stated the same. Seventeen percent of East Kootenay businesses believe they pay lower than other regional businesses, while only 9% of West Kootenay respondents stated the same.

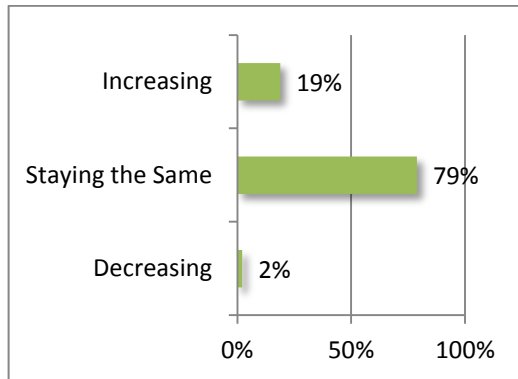
**Figure 51: Wages in relation to other businesses in the region - Technology sector**



### Recruitment and Retention

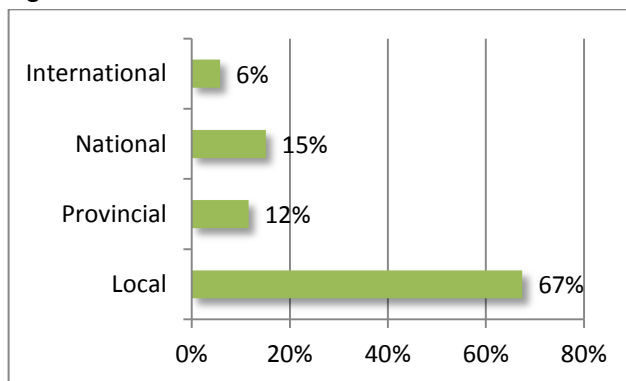
Most respondents (79%) agreed that the number of unfilled positions at their company is remaining relatively constant.

**Figure 52: Trend in unfilled positions - Technology sector**



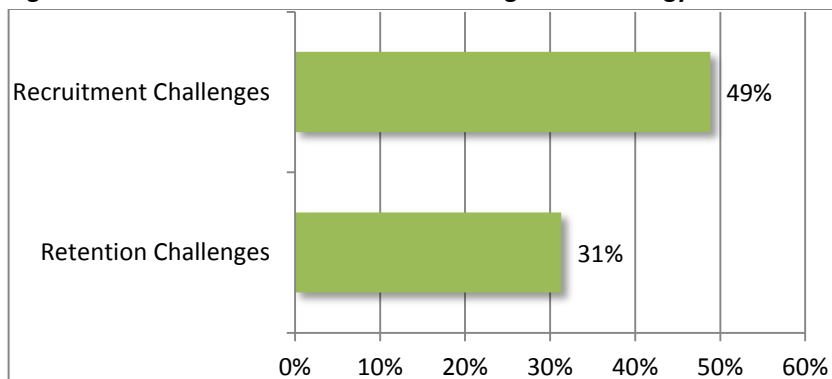
The majority of respondents (67%) indicated that they recruit their workforce from local communities. Fifteen percent recruit nationally and another 12% recruit provincially.

**Figure 53: Location of workforce recruitment - Technology sector**



Forty-nine percent of businesses interviewed reported that they have experienced challenges with recruiting new employees while 31% reported that they have had difficulties retaining existing employees.

**Figure 54: Recruitment and retention challenges - Technology sector**

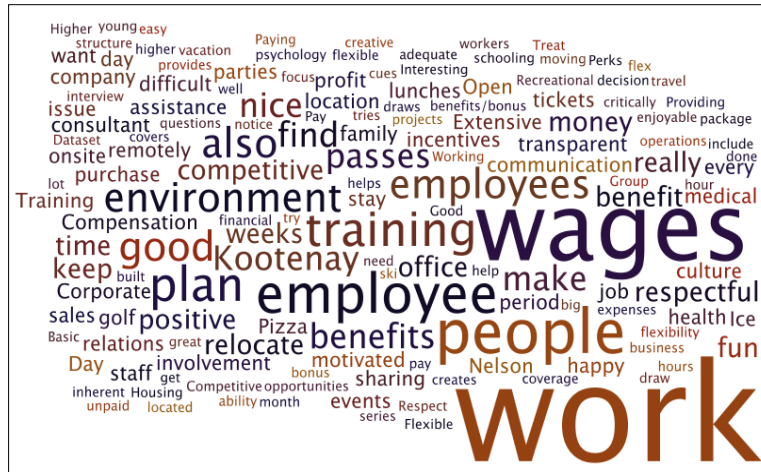


When asked what efforts businesses have undertaken to retain employees, 14 respondents indicated that they have focused on offering competitive wages and benefits. Ten indicated that they have worked to develop a culture of respect in the workplace and 6 have offered other

tangible perks to their employees. One business' approach to employee retention was summarized succinctly through the following excerpt from its survey data:

*"Providing a satisfying, respectful workplace and paying respectful wages".*

**Figure 55: Key words in respondents' descriptions of retention efforts - Technology sector**



When asked what efforts businesses have undertaken to recruit employees, 20 respondents reported that they use online forums/social media to advertise openings. Eighteen indicated that they rely on word of mouth advertising. Thirteen use print ads.

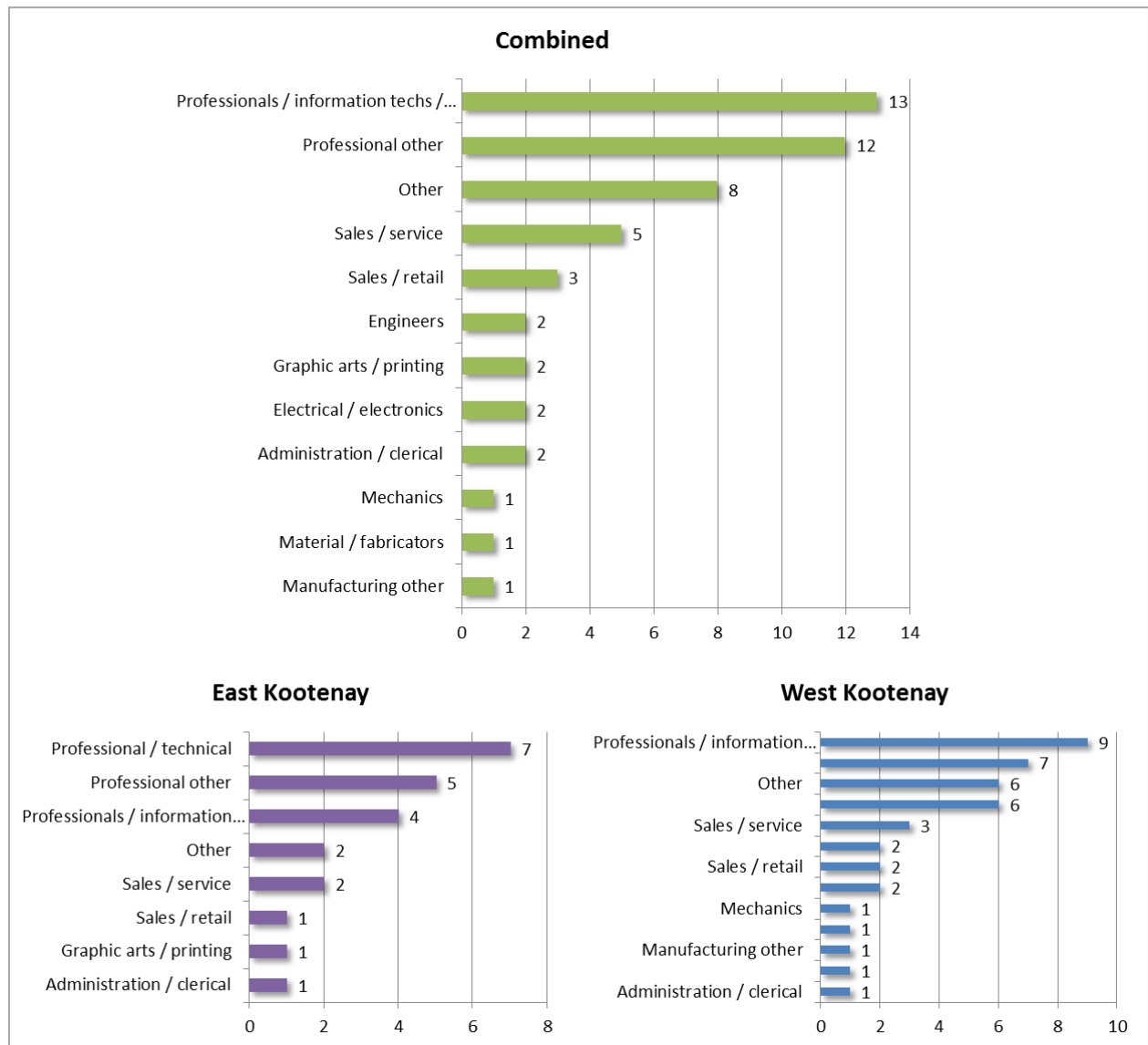
**Figure 56: Key words in respondents' descriptions of recruitment efforts - Technology sector**



The most important recruitment areas among surveyed businesses include information technology and programming professionals (13 respondents) and sales/service personnel (5 respondents). The most common recruitment areas were similar across the East and West Kootenay subregions; however, West Kootenay businesses indicated a more diverse set of recruitment areas. For example, engineers and electricians were noted by West Kootenay respondents as important recruitment areas, but not by respondents in the East Kootenay subregion. Professions included in the 'other' and 'professional other' categories illustrated in the graph below include

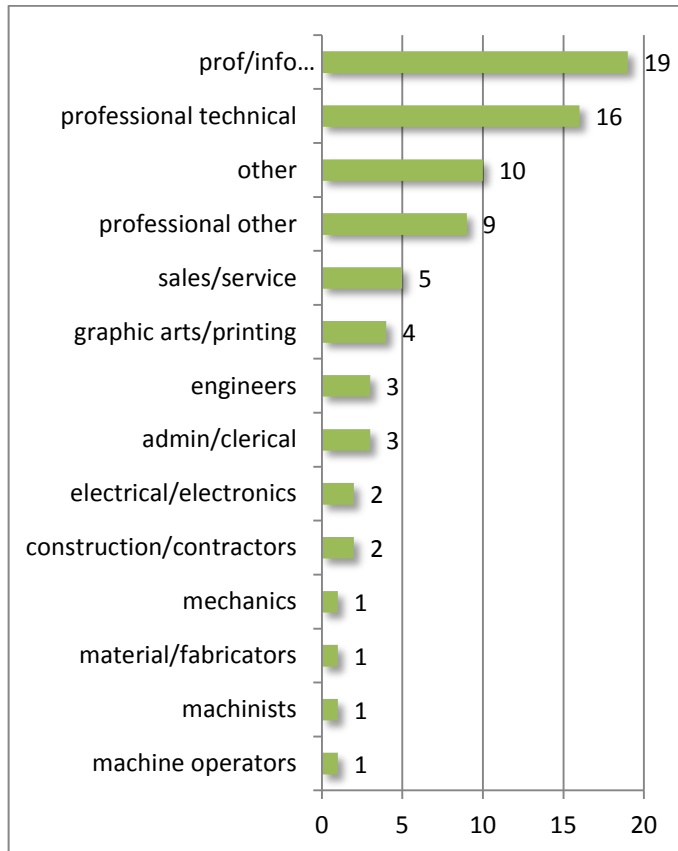
managers/project managers, security personnel, writers, photographers, drafters/designers, journalists, surveyors, certified accountants, statisticians and chemists.

**Figure 57: Current recruitment areas - Technology sector**



Thirty-one percent of respondents anticipate future recruitment challenges in one or more professions. Most significant amongst these future recruitment areas are information technology and programming professionals (19 respondents) and other technical professionals (16 respondents).

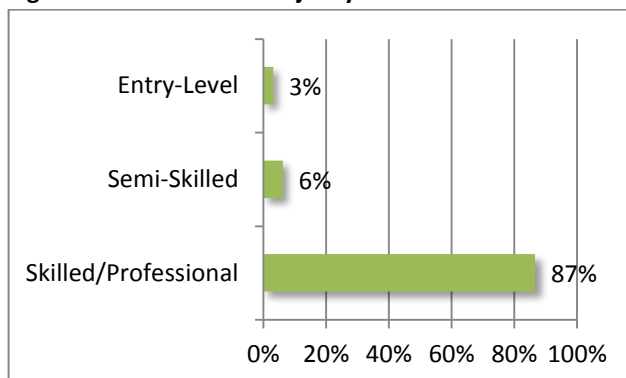
**Figure 58: Future recruitment areas - Technology sector**



### *Skills and Training*

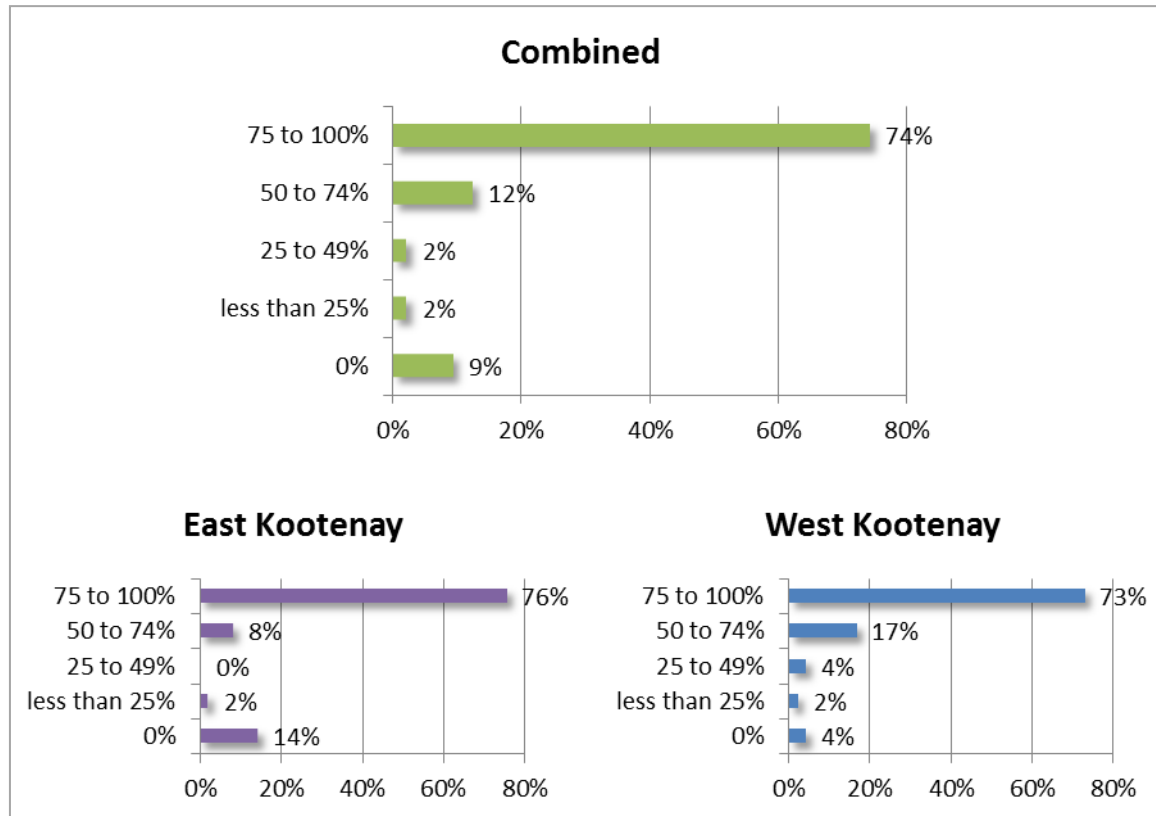
A strong majority of businesses (87%) reported that their workforce is primarily skilled and/or professional. Relatively few indicated that more than 50% of their workforce is comprised of semi-skilled (6%) or entry-level (3%) workers.

**Figure 59: Skill level of majority of workforce - Technology sector**



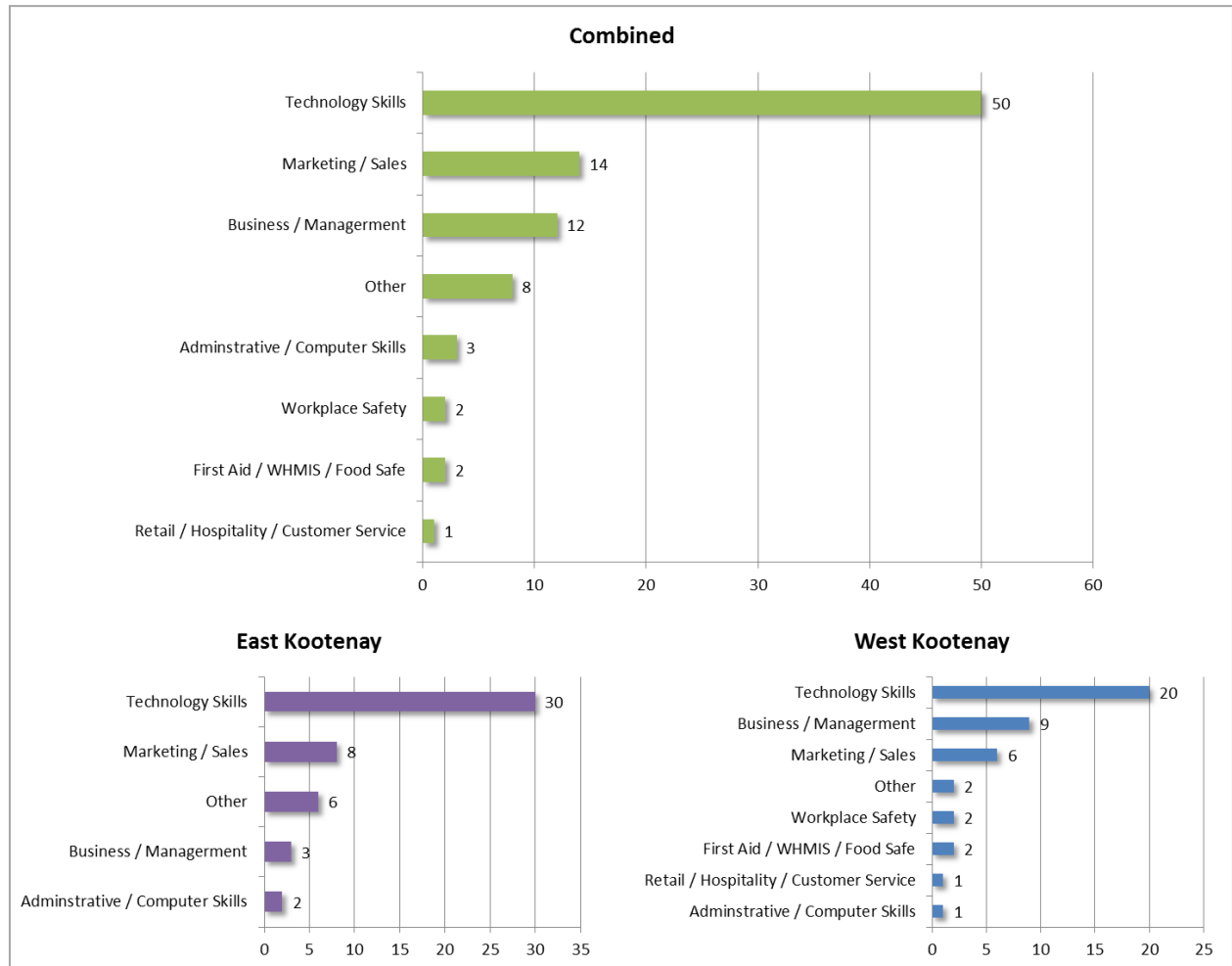
Skilled or professional workers appear to have a similar presence in East and West Kootenay businesses. Seventy-six percent of respondents in the East Kootenay subregion reported that over 75% of their workforce is comprised of skilled or professional workers while 73% of West Kootenay businesses reported the same.

**Figure 60: Skilled/professional component of workforce - Technology sector**



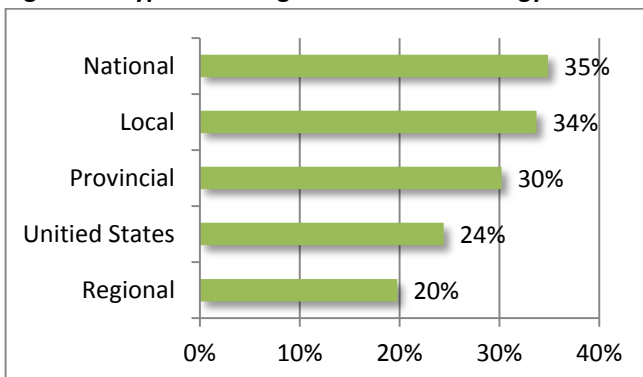
Eighty-two percent of respondents indicated that there are areas of training or professional development that would be of benefit to their employees. Fifty respondents stated that technology skills are a priority training area, 14 identified marketing and sales as important and 12 highlighted business/management training. Businesses in the two subregions identified a similar set of priority training areas.

**Figure 61: Training and professional development needs - Technology sector**



Thirty-five percent of businesses interviewed typically travel nationally to attend training, 34% travel locally and 30% travel provincially.

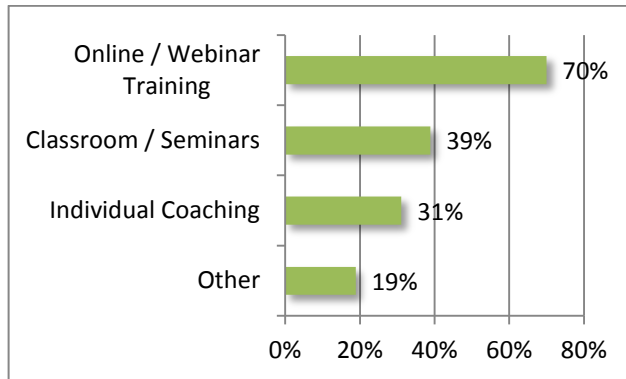
**Figure 62: Typical training locations - Technology sector**



Seventy percent of respondents believe that training delivered through an online or webinar format is effective. Thirty nine percent prefer classroom/seminar style training and 31% prefer individual coaching.



**Figure 63: Preferred training mechanisms - Technology sector**



### Unions

Three businesses (4%) reported that they currently have union status. Of these respondents, 2 indicated that the status of labour relations is currently good while one reported that it is excellent.



**Figure 64: Status of labour relations - Technology sector**

### COMPARISON OF SECTORS

Not surprisingly, data revealed some important differences between workforces in the manufacturing and technology sectors in the Columbia Basin Boundary region.

Staffs at technology companies tend to be considerably smaller than at manufacturing companies. Twelve percent of manufacturing businesses reported employing more than 50 people, while only 2% of technology businesses reported the same. The average number of workers per business is 43.6 in the manufacturing sector and 9.4 in the technology sector.

Data indicate that technology companies also tend to employ a smaller percentage of full-time workers than does the manufacturing sector. Almost all jobs at respondent manufacturing businesses (94%) are full-time. Seventy-seven percent of jobs at surveyed technology businesses are full-time.

Manufacturing businesses tend to recruit locally while technology companies look further afield to fill their positions. Sixty-seven percent of technology companies reported that they primarily look to local communities when recruiting while 89% of manufacturing businesses reported the same.

This finding is likely linked to the skill level of each sector's respective workforce. Seventy-four percent of technology businesses indicated that skilled or professional workers make up more than 75% of their workforce. Only 44% of manufacturing businesses reported the same.

Data indicate that employees at technology companies are generally younger than those at manufacturing businesses. Sixteen percent of respondents in the manufacturing sector reported that the majority of their essential employees are older than 50 years, as compared to 9% in the technology sector. Thirty-five percent of respondents in the technology sector reported that the majority of their essential employees are between 26 and 34 years of age, as compared to 19% in the manufacturing sector.

Key recruitment areas also differ between the two sectors. Manufacturing businesses listed plant manager/operator, machine operator, fabricator and maintenance worker high on their list of professions that they have struggled to recruit. Technology businesses listed professions like information technology professional, sales/service personnel and engineers as priority recruitment areas.

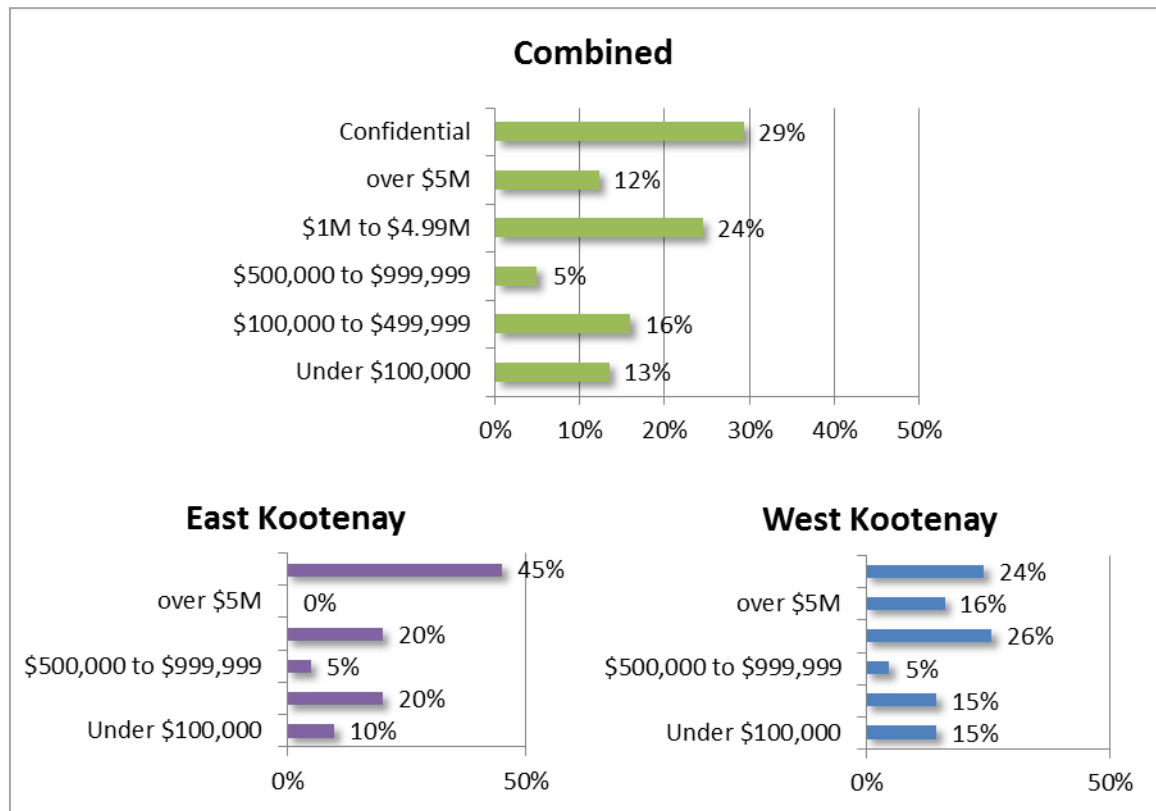
## **SALES**

### **MANUFACTURING SECTOR**

#### *Market Size and Share*

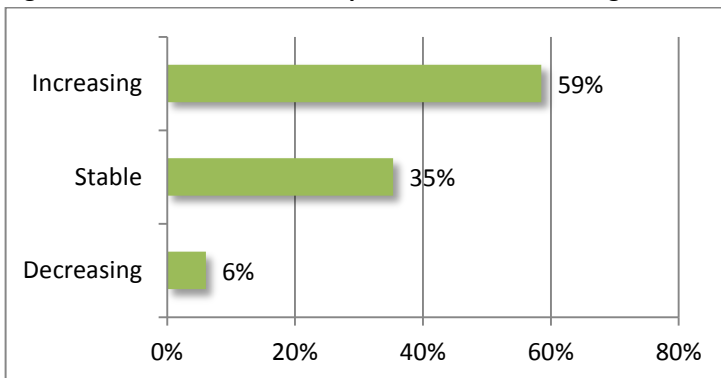
Annual sales figures for interviewed businesses varied greatly. Across the region as a whole, 12% of respondents reported sales of over \$5 million, 24% reported sales of between \$1 million and \$4.9 million, 5% reported sales of \$500,000 to \$999,999, 16% reported sales of \$100,000 to \$499,999 and 13% reported sales of under \$100,000. Twenty nine percent of respondents did not share annual sales information. Reported sales at West Kootenay businesses were higher on average. Forty-two percent of West Kootenay respondents indicated that their annual sales are over \$1 million while only 20% of East Kootenay respondents indicated the same.

**Figure 65: Annual sales - Manufacturing sector**



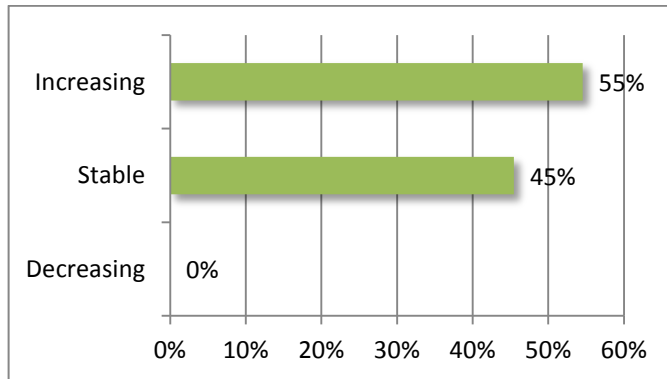
The majority of respondents (59%) indicated that the size of the market for their product is increasing, 35% indicated that the market is stable and a small percentage (6%) reported that the size of the market for their product is decreasing.

**Figure 66: Status of market for product - Manufacturing sector**



Fifty-five percent of businesses interviewed indicated that their share of their product's market, as compared to competitors, is increasing. Forty-five percent believe that their market share is stable. Notably, no respondents believe that their market share is decreasing.

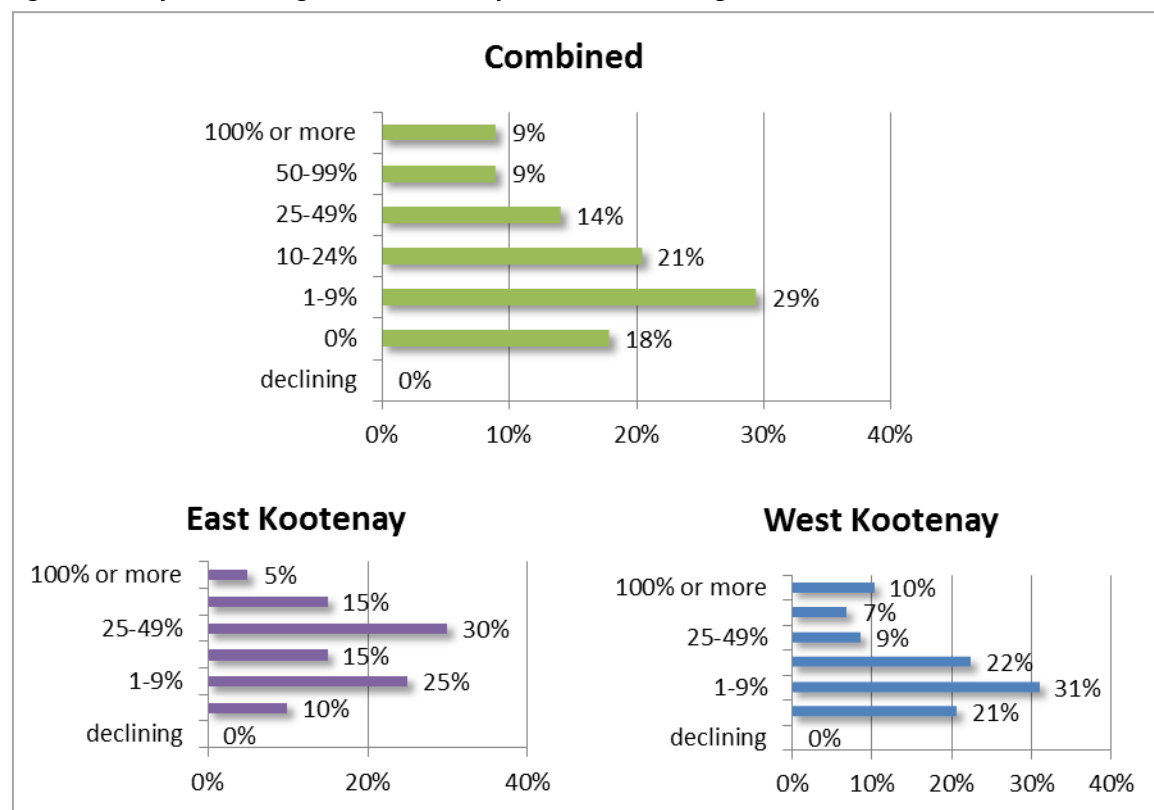
**Figure 67: Market share compared to competitors - Manufacturing sector**



### Growth

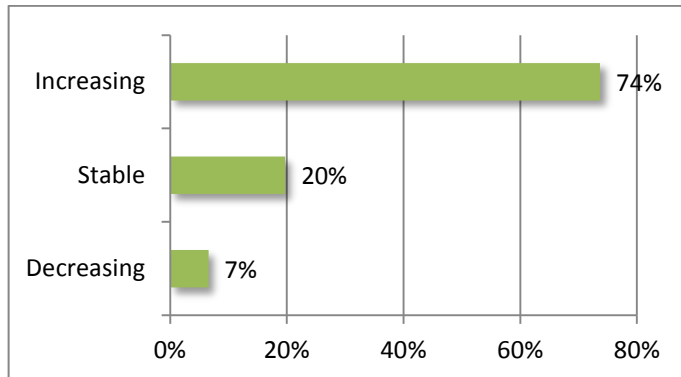
Sales projections for the coming year revealed some notable differences between the East and West Kootenay subregions. East Kootenay businesses tend to have more positive projections for sales growth than those in the West Kootenay subregion. Fifty percent of East Kootenay businesses anticipate growth of over 25% over the coming year as compared to just 26% of West Kootenay businesses. Twenty-one percent of West Kootenay businesses expect to see no growth over the coming year as compared to just 10% of East Kootenay businesses. As a whole region, 29% of businesses expect to see growth of between 1 and 9%, 21% expect to see growth of between 10 and 24% and 18% of respondents expect to see no growth in sales.

**Figure 68: Projected sales growth over next year - Manufacturing sector**



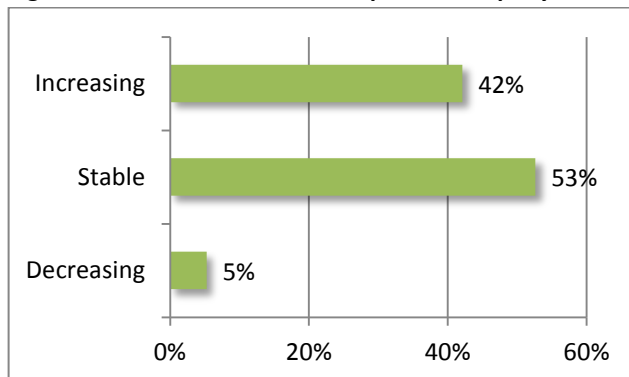
Seventy-four percent of respondents indicated that sales at their location have increased over time. Another 20% indicated that sales have remained stable.

**Figure 69: Historic sales trend at this location - Manufacturing sector**



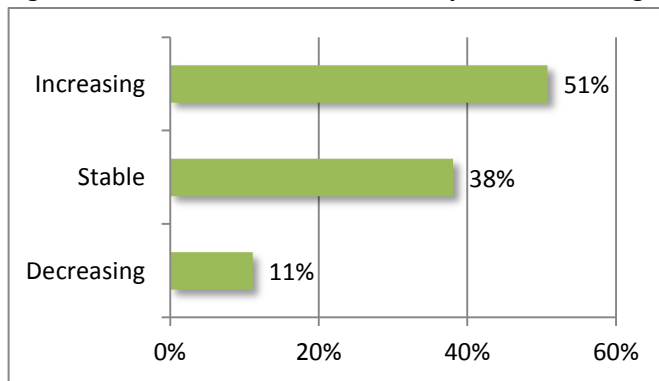
The historic sales trend at parent companies (where applicable) was less positive, according to surveyed businesses. Forty-two percent reported that sales have increased over time while 53% reported that they have remained stable.

**Figure 70: Historic sales trend at parent company - Manufacturing sector**

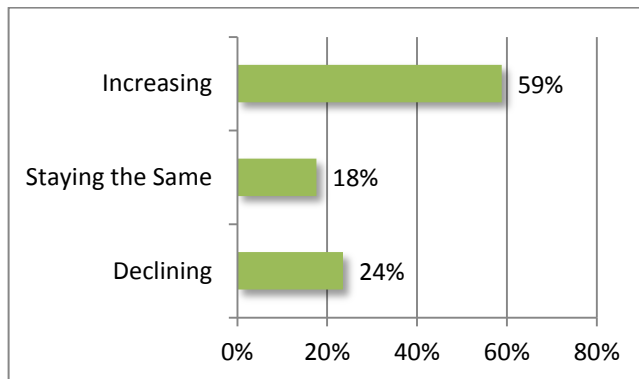


Fifty-one percent of respondents indicated that the historic sales trend in their respective industry has increased over time while another 38% indicated that it has remained stable.

**Figure 71: Historic sales trend in industry - Manufacturing sector**



Of the respondents that export products, 59% indicated that export sales have been increasing while 24% indicated that they have been declining. The remainder (18%) reported that export sales have been stable.

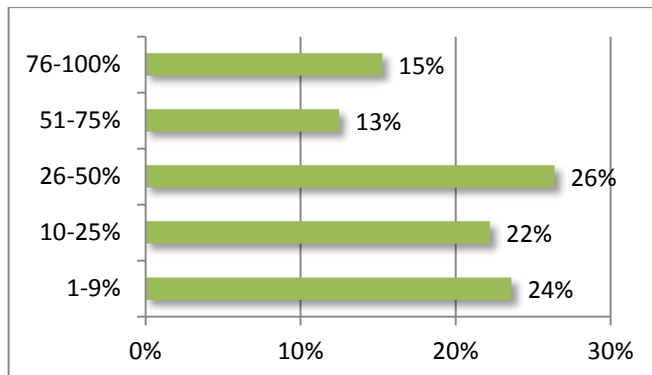


**Figure 72: Export sales trend - Manufacturing sector**

#### *Source of Sales*

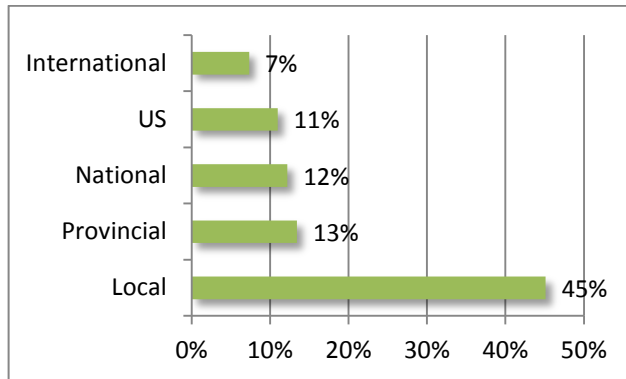
Over a quarter of respondents (26%) reported that 26 to 50% of their sales are generated by their top 3 customers. The remaining respondents reported varying degrees of dependence on sales to their top three customers.

**Figure 73: Sales generated by top 3 customers - Manufacturing sector**



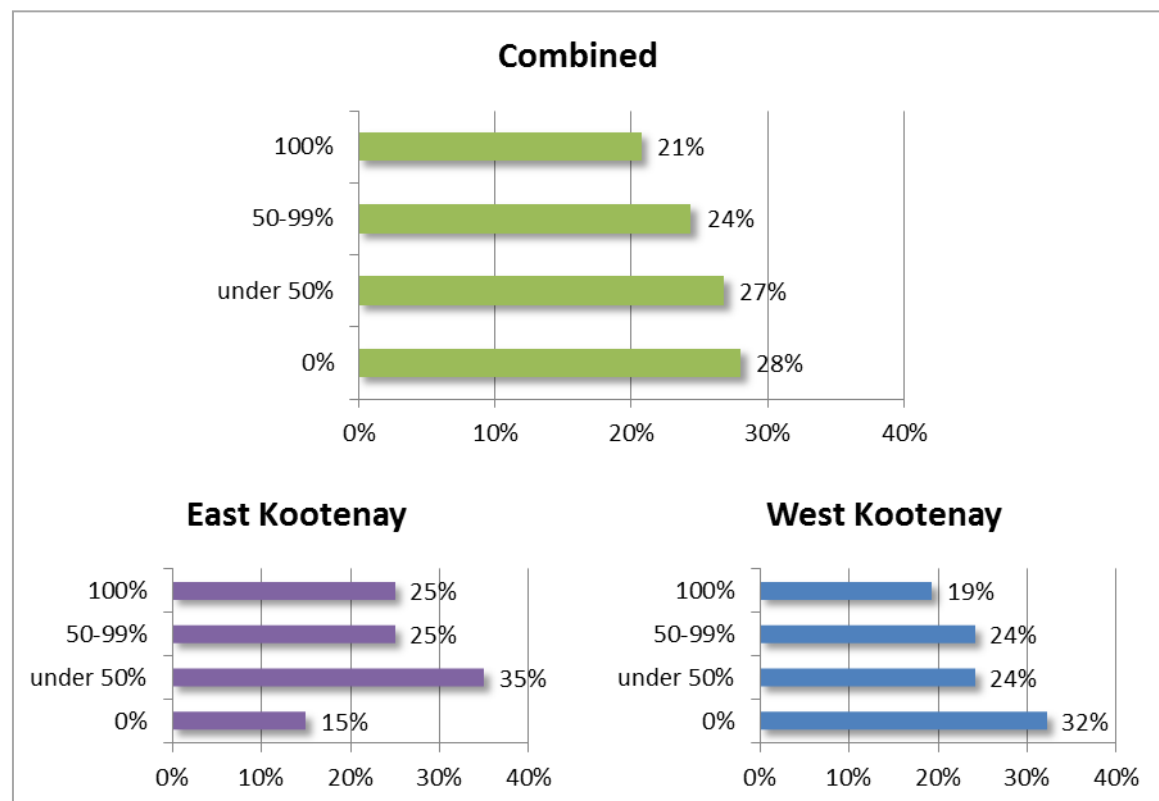
Forty-five percent of respondents indicated that the majority of their sales originate from local customers. Fewer respondents (13%, 12%, 11% and 7%) indicated that the majority of their sales originate from provincial, national, US or international customers, respectively.

**Figure 74: Geographic source of over 50% of sales - Manufacturing sector**

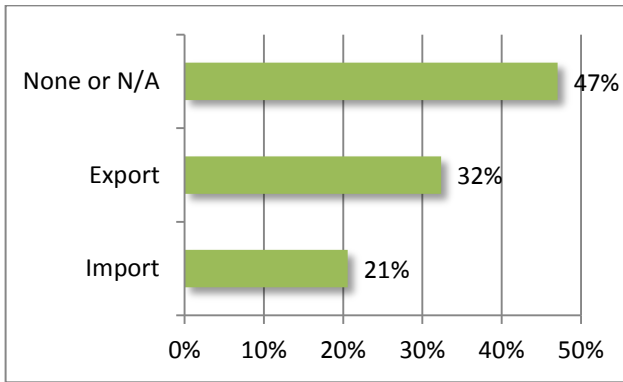


Respondents in the East Kootenay subregion indicated that they rely more heavily on local customers for sales than do respondents in the West Kootenay subregion. Only 15% of East Kootenay businesses, as compared to 32% of West Kootenay businesses, reported that none of their sales are generated by local or regional markets. Twenty-five percent of East Kootenay businesses indicated that 100% of their sales are to local customers while only 19% of West Kootenay businesses reported the same.

**Figure 75: Local component of sales - Manufacturing sector**



Thirty-two percent of businesses interviewed reported that they export products to international markets, 21% reported that they import from international markets and 47% indicated that they do not engage in international trade.

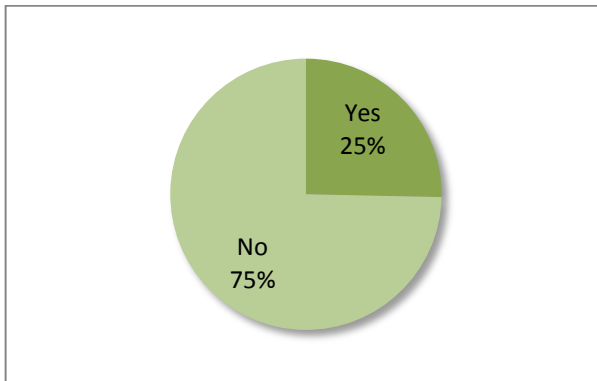


**Figure 76: International trade status - Manufacturing sector**

### *Procurement*

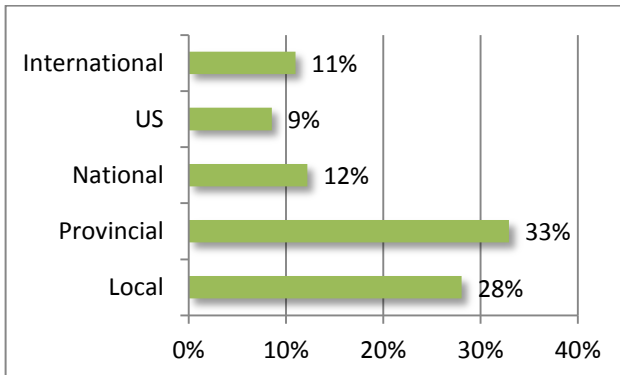
Twenty-five percent of businesses interviewed reported that they engage in government procurement. Seventy-five percent reported that they do not.

**Figure 77: Engagement in government procurement processes - Manufacturing sector**



Twenty-eight percent of respondents indicated that they acquire the majority of their supplies from local sources and 33% indicated that they purchase supplies from other sources in BC. Fewer respondents (12%, 9% and 11%) indicated that they acquire the majority of their supplies from national, US and international sources, respectively.

**Figure 78: Source of over 50% of supplies - Manufacturing sector**



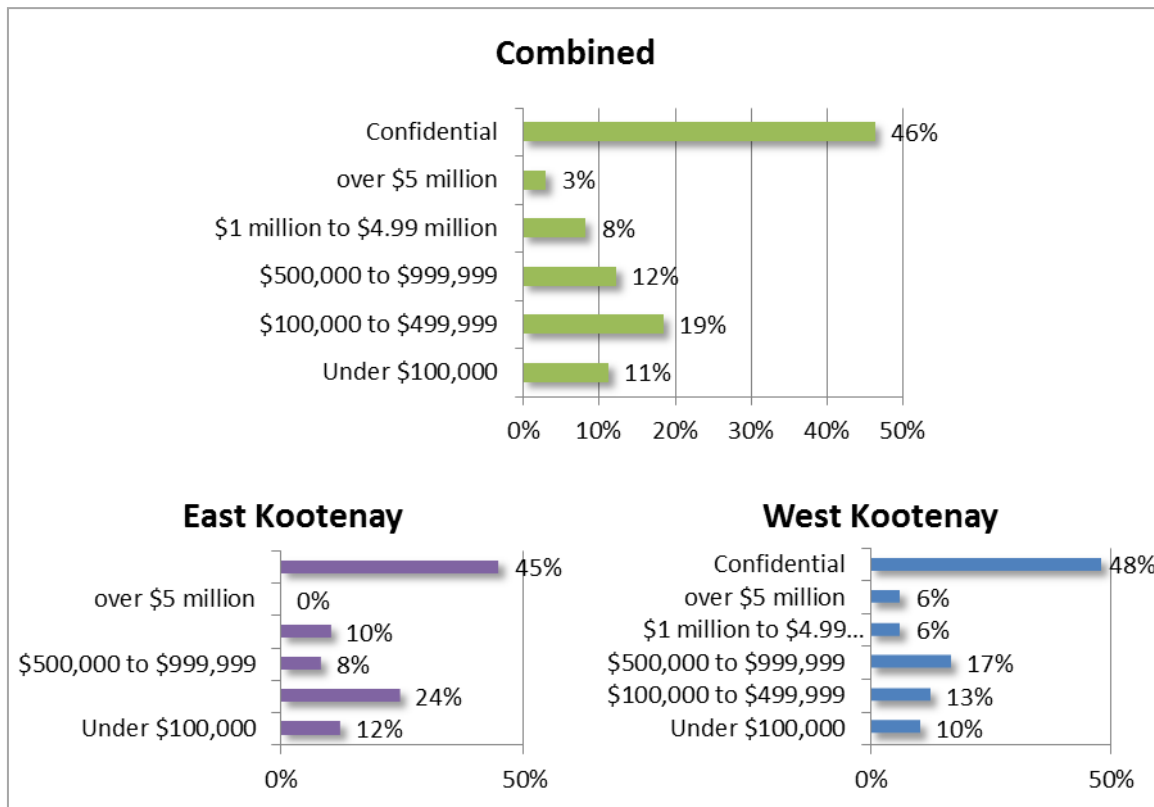


## TECHNOLOGY SECTOR

### Market Size and Share

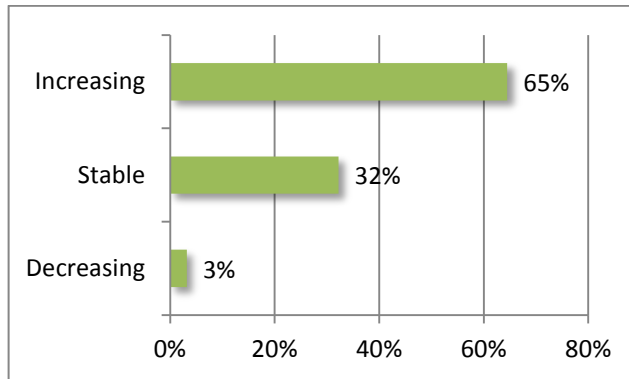
Annual sales figures at businesses interviewed in the West Kootenay subregion are, on average, higher than annual sales figures for businesses in the East Kootenay subregion. Twenty-nine percent of West Kootenay businesses reported annual sales of over \$500,000 while only 18% of East Kootenay businesses reported the same. As a region, the most commonly reported sales range (19% of respondents) was \$100,000 to \$499,999. Forty-six percent of respondents did not share annual sales information.

**Figure 79: Annual sales - Technology sector**



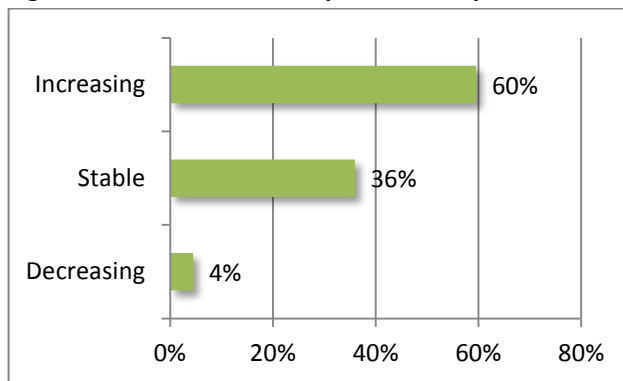
The majority of respondents (65%) indicated that the size of the market for their product is increasing, 32% indicated that the market is stable and a small percentage (3%) reported that the size of the market for their product is decreasing.

**Figure 80: Status of market for product - Technology sector**



Sixty percent of businesses interviewed indicated that their share of their product's market, as compared to competitors, is increasing. Thirty-six percent believe that their market share is stable. Four percent believe that their market share is decreasing.

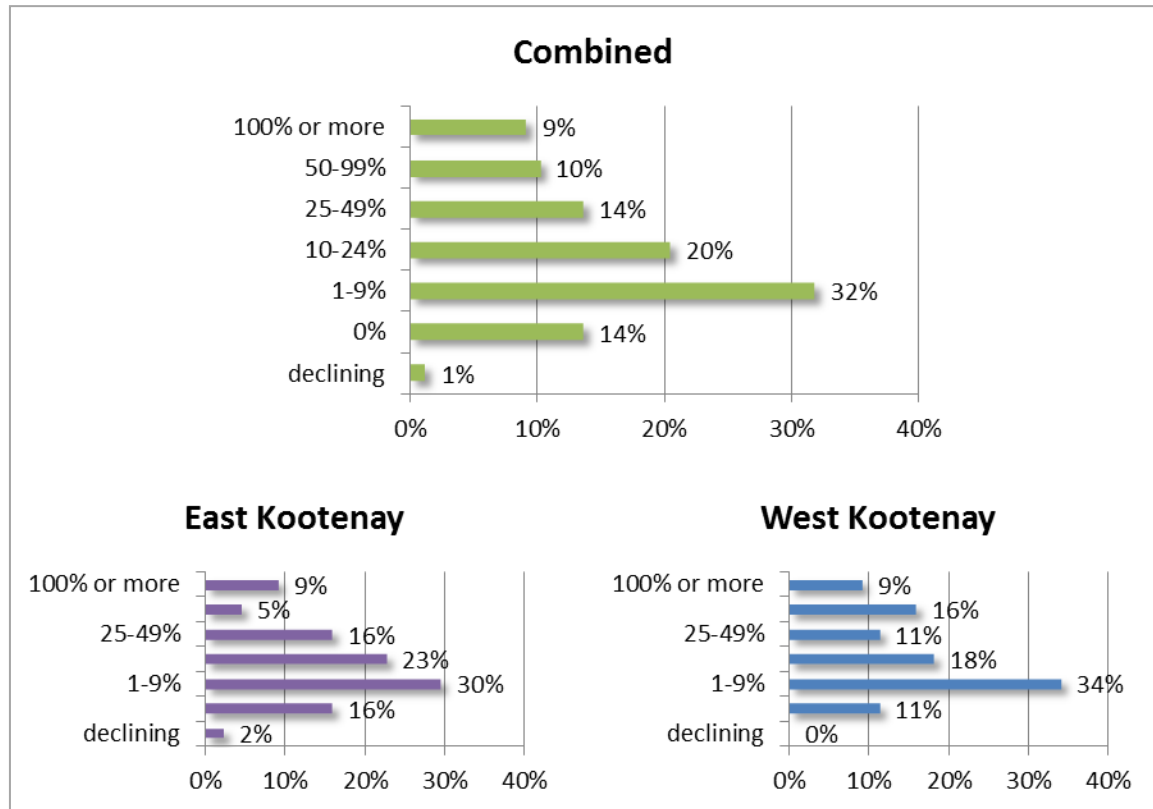
**Figure 81: Market share compared to competitors - Technology sector**



### *Growth*

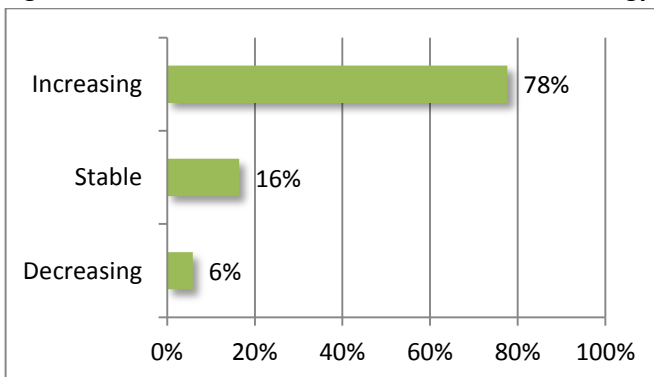
Most businesses interviewed expect to see low to moderate growth in sales over the coming years. Thirty-two percent of respondents anticipate growth of between 1 and 9% and 20% of respondents anticipate growth of between 10 and 24%. Sales projections are similar between East and West Kootenay businesses; however, West Kootenay businesses are slightly more optimistic. Eighteen percent of East Kootenay businesses expect to see no growth or negative growth as compared to 11% of West Kootenay businesses.

**Figure 82: Projected sales growth over next year - Technology sector**



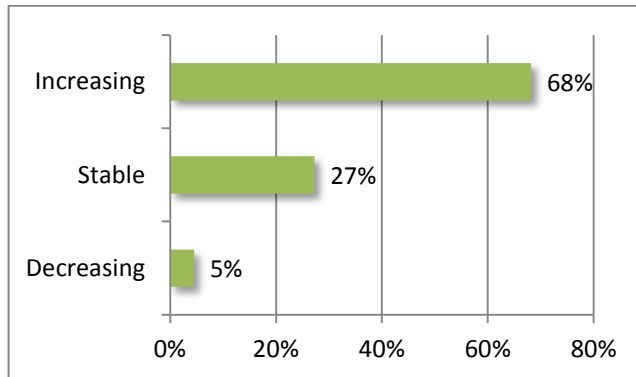
Seventy-eight percent of respondents indicated that sales at their facility have increased over time. Another 16% indicated that sales have remained relatively stable.

**Figure 83: Historic sales trend at this location - Technology sector**



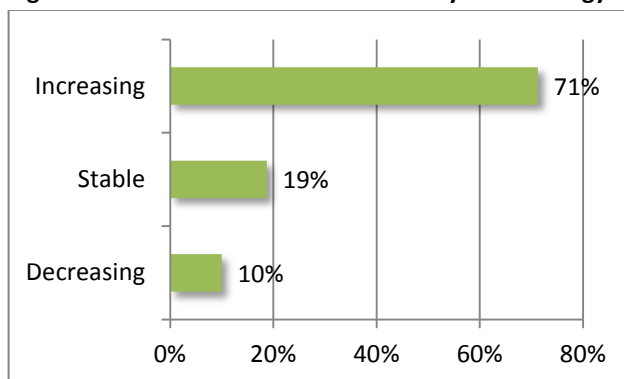
The historic sales trend at parent companies (where applicable), was slightly less positive. Sixty-eight percent of respondents indicated that sales have increased over time and another 27% indicated that sales have remained relatively stable.

**Figure 84: Historic sales trend at parent company - Technology sector**



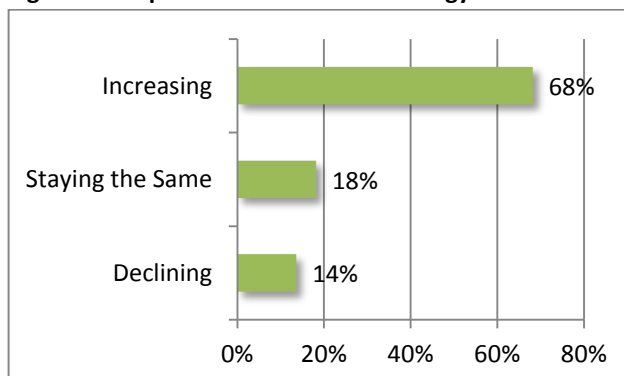
Seventy-one percent of respondents indicated that the historic sales trend in their respective industry has increased over time while another 19% indicated that it has remained stable.

**Figure 85: Historic sales trend in industry - Technology sector**



Of the respondents that export products, 68% reported that export sales have been increasing while 18% indicated that they have been stable. The remainder (14%) reported that export sales have been declining.

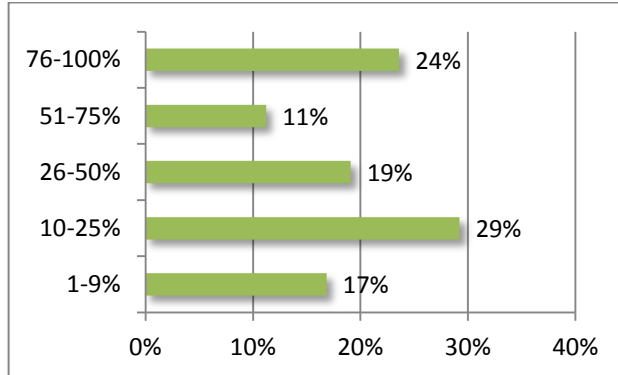
**Figure 86: Export sales trend - Technology sector**



### Source of Sales

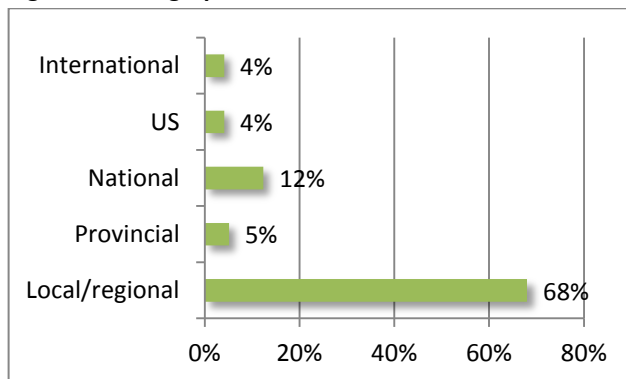
Over a quarter (29%) of respondents reported that 10-25% of their sales are generated by their top 3 customers. Twenty-four percent indicated that they are wholly or almost wholly dependent on just a few buyers, reporting that 76-100% of sales are generated by their top 3 customers.

**Figure 87: Sales generated by top 3 customers - Technology sector**



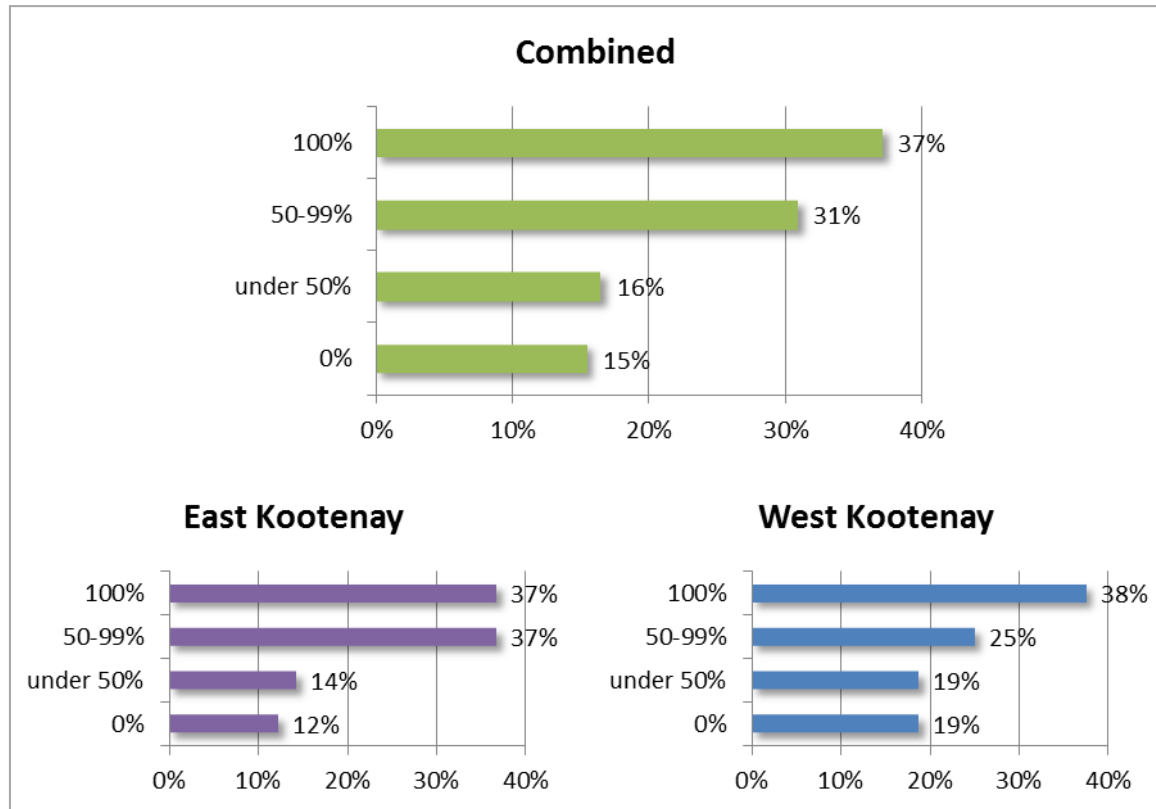
Sixty-eight percent of respondents indicated that the majority of their sales originate from local customers. Another 12% indicated that the majority of their sales are to customers in other provinces. Fewer respondents (5%, 4% and 4%) indicated that the majority of their sales originate from provincial, US or international customers, respectively.

**Figure 88: Geographic source of over 50% of sales - Technology sector**



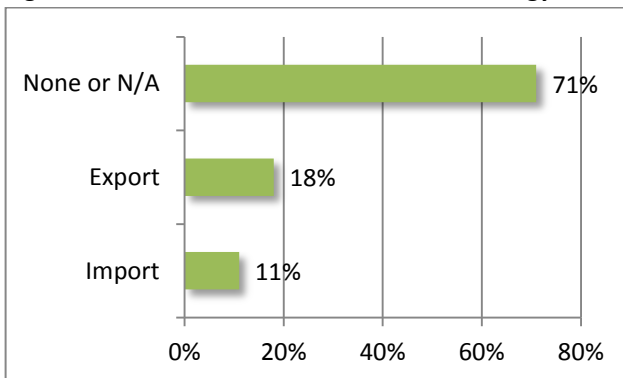
Respondents in the East Kootenay subregion reported a higher level of engagement with local markets than those in the West Kootenay subregion. Seventy-four percent of East Kootenay businesses indicated that more than 50% of their sales are generated by local customers, as compared to 63% of West Kootenay businesses. As a region, 37% of respondents indicated that 100% of their sales are to local customers.

**Figure 89: Local component of sales - Technology sector**



Eighteen percent of businesses reported that they export products to international markets, 11% reported that they import from international markets and 71% indicated that they do not engage in international trade.

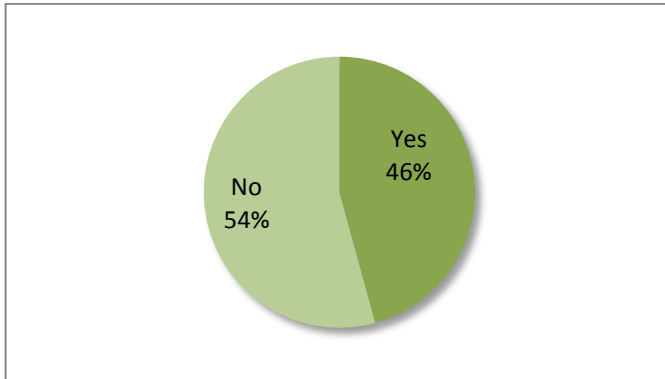
**Figure 90: International trade status - Technology sector**



### *Procurement*

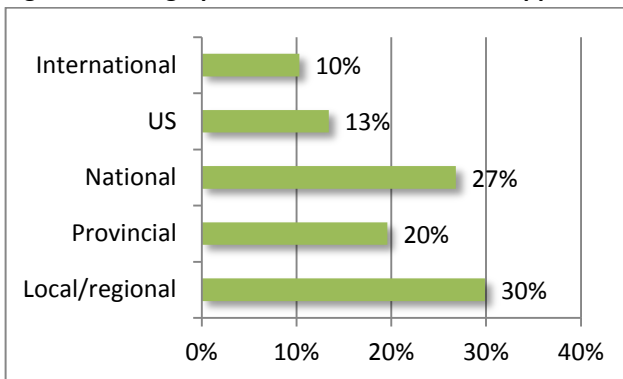
Forty-six percent of businesses indicated that they engage in government procurement processes. Fifty-four percent reported that they do not.

**Figure 91: Participation in government procurement processes - Technology sector**



Thirty percent of respondents indicated that they acquire the majority of their supplies from local sources and 27% indicated that they purchase supplies from other provinces in Canada. Fewer respondents (20%, 13% and 10%) indicated that they acquire the majority of their supplies from provincial, US and international sources, respectively.

**Figure 92: Geographic source of over 50% of supplies - Technology sector**



### COMPARISON OF SECTORS

Data revealed some notable differences between sales information reported by businesses in the manufacturing and technology sectors. Geographic variations, however, were less pronounced for the sales module of the BRE survey than for other survey modules.

Survey responses indicate that manufacturing businesses tend to have a more diverse customer base than businesses in the technology sector. Twenty-four percent of technology businesses reported that more than 75% of their sales are generated by their top three customers. Only 15% of manufacturing businesses reported the same. Similarly, 65% of technology businesses reported that less than 50% of their sales are generated by their top 3 customers while 72% of manufacturing businesses reported the same.

Technology businesses appear to be more connected to local markets than manufacturing businesses. Sixty-eight percent of respondents in the technology sector indicated that the majority of their sales are to customers within the region. Only 45% of respondents in the manufacturing sector reported the same. This difference is especially pronounced among businesses in the East

Kootenay subregion, where 74% of businesses in the technology sector reported that the majority of their sales are to local customers, as compared to 50% of businesses in the manufacturing sector.

Data indicate that manufacturing businesses are more engaged with global markets than those in the technology sector. Seventy-one percent of technology respondents do not engage in international trade as compared to just 47% of manufacturing respondents.

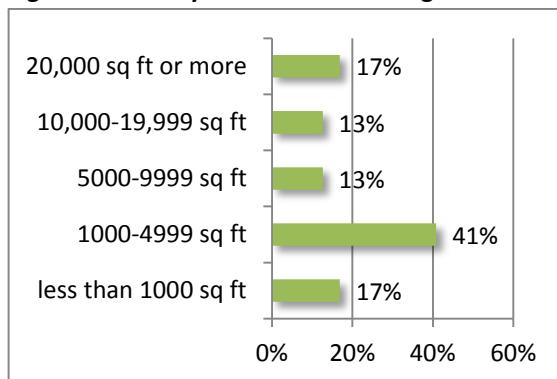
## FACILITIES AND EQUIPMENT

### MANUFACTURING SECTOR

#### *Size and Condition*

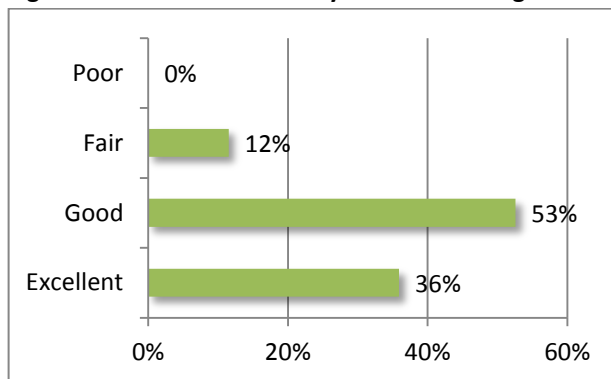
Forty-one percent of manufacturing businesses indicated that the size of their facility is between 1,000 and 4,999 square feet. Another seventeen percent reported that their facility is less than 1,000 square feet. The same number of respondents reported that their facility is 20,000 square feet or larger in size.

**Figure 93: Facility size - Manufacturing sector**



Fifty-three percent of businesses interviewed reported that their facility is in good condition and 36% reported that it is in excellent condition. Notably, no respondents indicated that their facility is in poor condition.

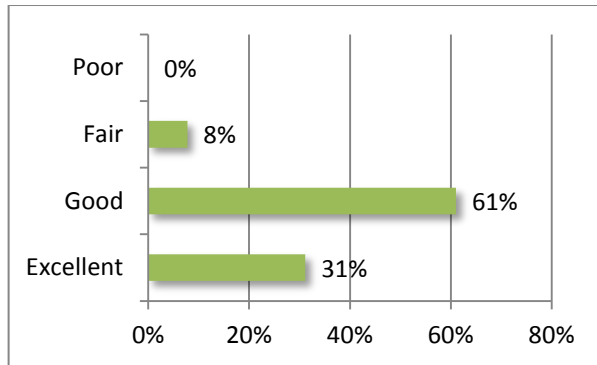
**Figure 94: Condition of facility - Manufacturing sector**





Sixty-one percent of respondents indicated that their equipment is generally in good condition. Another 31% indicated that the condition of their equipment is excellent. A small percentage (8%) reported that their equipment is in fair condition.

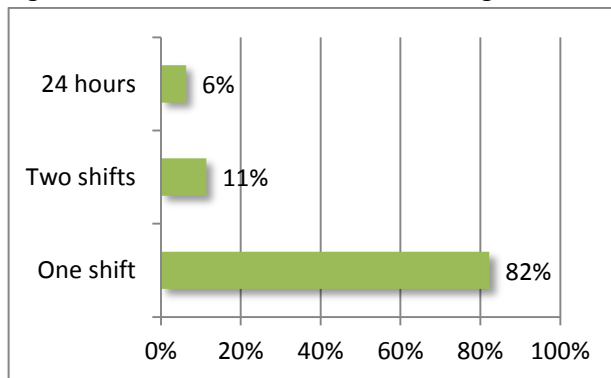
**Figure 95: Condition of equipment - Manufacturing sector**



### *Shifts*

Eighty-two percent of respondents indicated that their business operates one shift per day, 11% reported that they operate 2 shifts and 6% reported that they operate 24-hours per day.

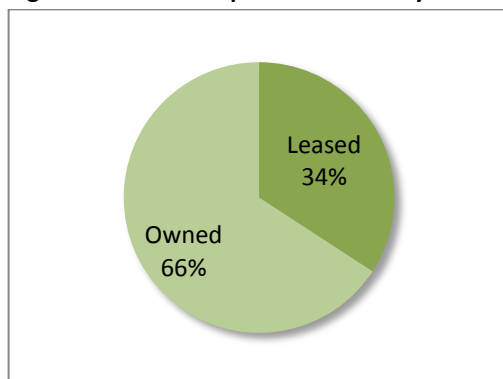
**Figure 96: Number of shifts - Manufacturing sector**



### *Ownership*

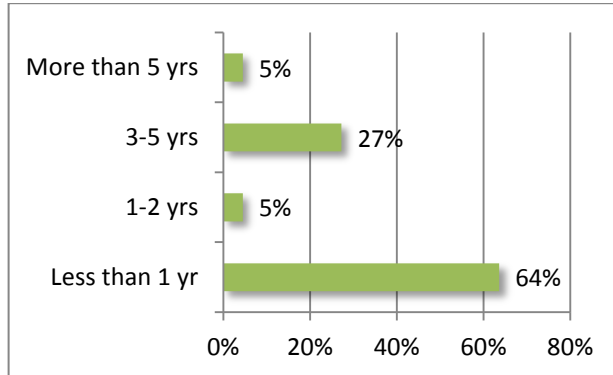
Thirty-four percent of businesses interviewed lease their facility. Sixty-six percent own it.

**Figure 97: Ownership status of facility - Manufacturing sector**



Of the respondents that lease their facility, a strong majority (64%) indicated that the length of time remaining on their lease is less than one year. Twenty-seven percent reported that there is between 3 and 5 years remaining on their lease. Ninety-three percent of respondents expect to renew their current lease agreement.

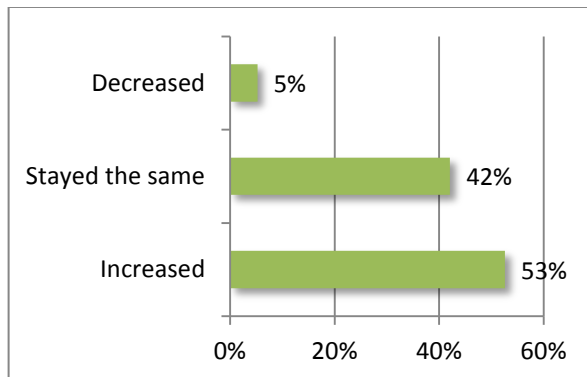
**Figure 98: Length of time remaining on lease - Manufacturing sector**



#### *Investment and Expansion*

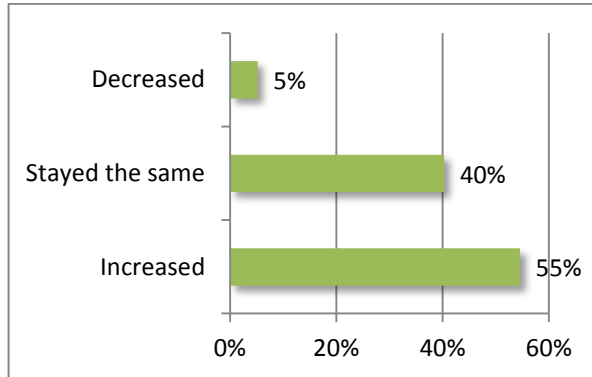
The majority of respondents (53%) reported that their company's investment in its facility has increased over the last 18 months and 42% reported that the level of investment has stayed the same.

**Figure 99: Investment in facility (past 18 months) - Manufacturing sector**



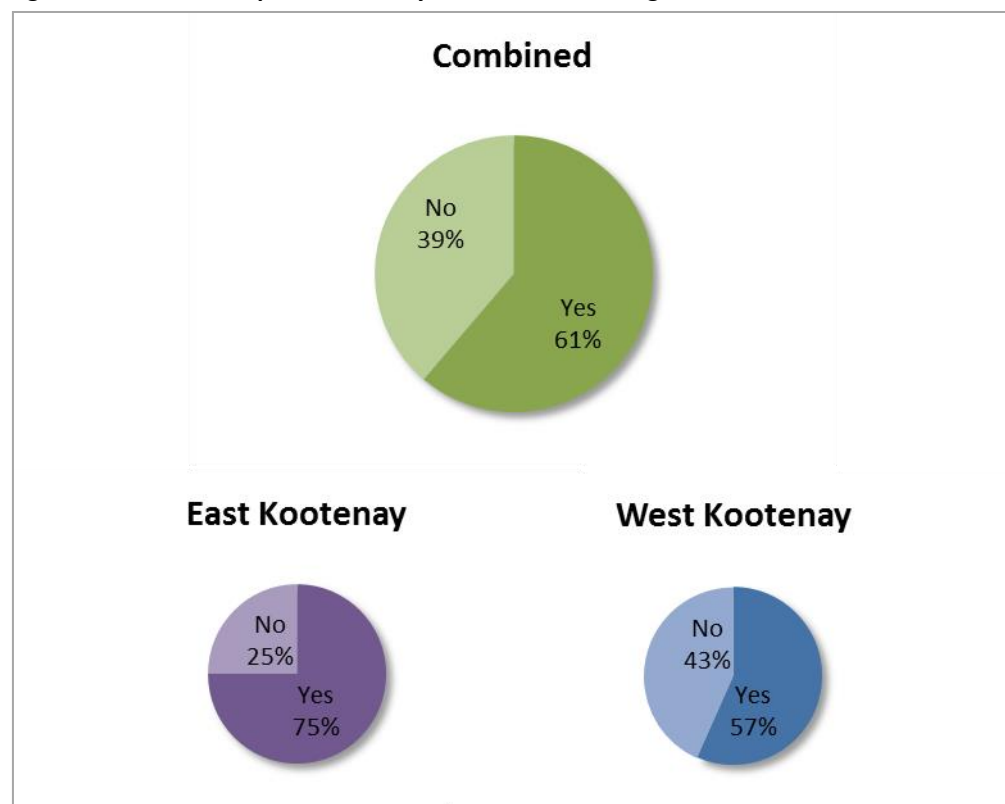
Respondents reported a similar trend regarding investments in equipment. Fifty-five percent indicated that investment has increased over the past 18 months and 40% indicated that it has stayed the same.

**Figure 100: Investment in equipment (past 18 months) - Manufacturing sector**



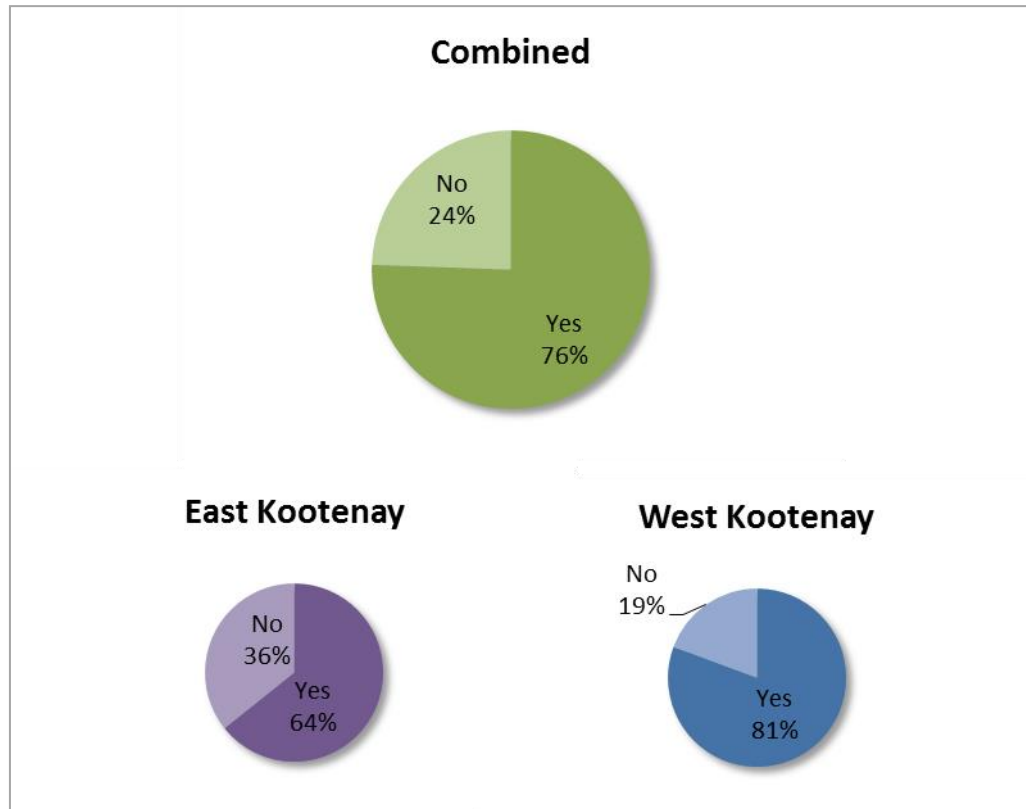
A higher percentage of East Kootenay businesses (75%), as compared to West Kootenay businesses (57%), indicated that they plan to expand in the next three years. As a region, 61% of businesses plan to expand within three years. The vast majority (91%) of those respondents anticipate that their expansion will occur within the community.

**Figure 101: Plans to expand within 3 years - Manufacturing sector**



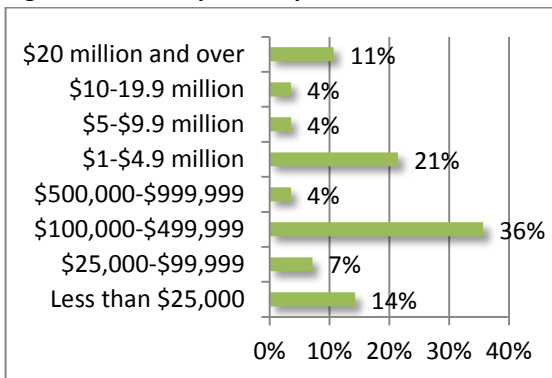
As a region, over three quarters (76%) of the businesses that are planning a near-term expansion reported that their current site is adequate; however, results from West Kootenay and East Kootenay respondents were notably different. Thirty-six percent of East Kootenay businesses reported that their site was not adequate to support future expansion while only 19% of West Kootenay businesses reported the same.

**Figure 102: Adequacy of current site for expansion - Manufacturing sector**



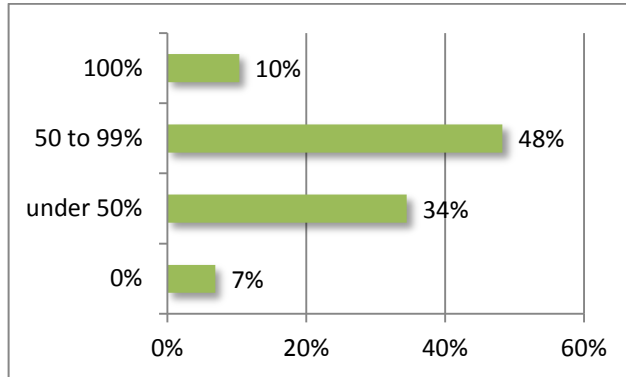
When asked how much businesses were planning to invest in their impending expansion, the highest number of respondents (36%) reported that they will spend \$100,000 - \$499,999, followed by \$1 million - \$4.9 million (21%) and less than \$25,000 (14%).

**Figure 103: Anticipated expansion investment - Manufacturing sector**



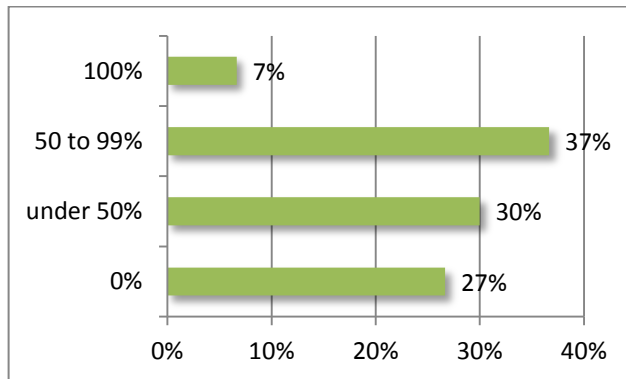
Ten percent of respondents indicated that 100% of their total anticipated expansion budget will be spent on equipment and technology. Another 48% expect that between 50 and 99% of their expansion budget will be spent on equipment and technology.

**Figure 104: Component of expansion budget for equipment and technology - Manufacturing sector**



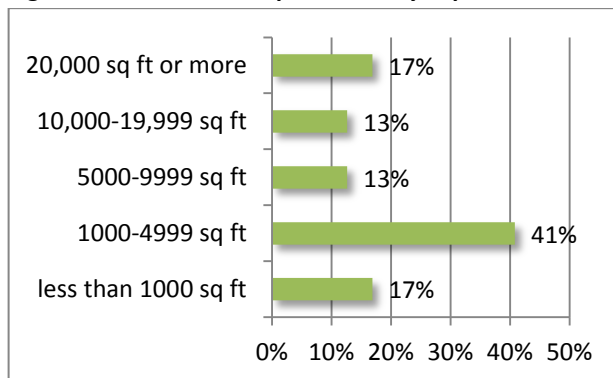
Seven percent of respondents indicated that 100% of their total anticipated expansion budget will be spent on real estate. Another 37% expect that between 50 and 99% of their expansion budget will be spent on real estate.

**Figure 105: Component of expansion budget for real estate - Manufacturing sector**



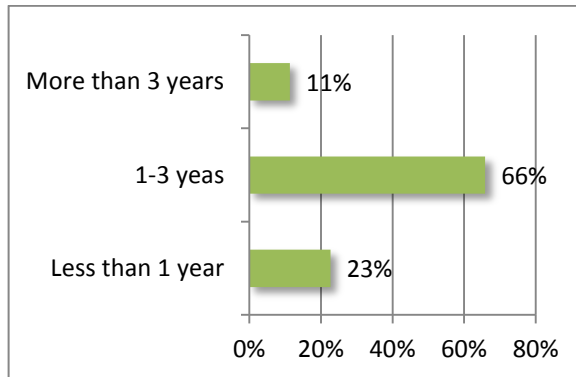
Of the businesses planning a near-term expansion, 41% indicated that their facility is expected to increase in size by 1,000-4,999 square feet. The remainder of respondents reported varying sizes of facility expansion.

**Figure 106: Size of anticipated facility expansion - Manufacturing sector**



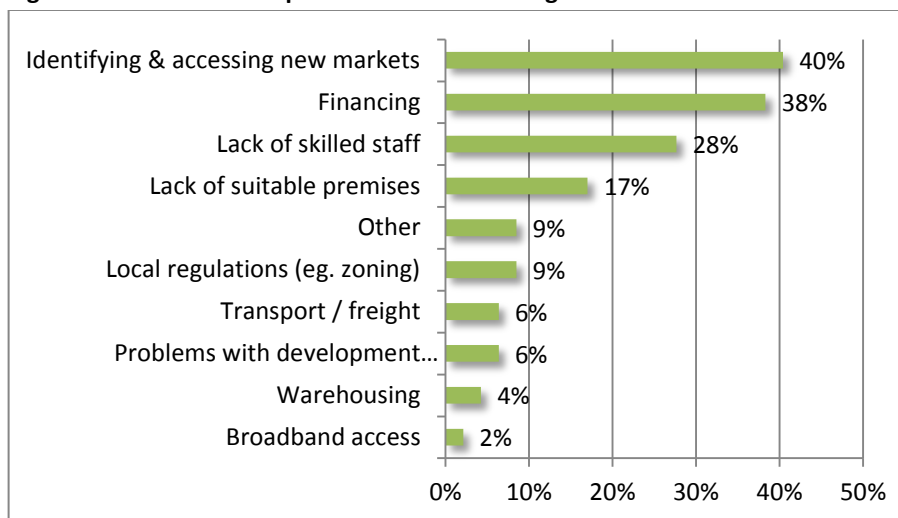
Most businesses planning an expansion (66%) expect to expand within 1-3 years. Twenty-three percent expect the process to be shorter and 11% expect it to be longer.

**Figure 107: Timeframe for expansion - Manufacturing sector**



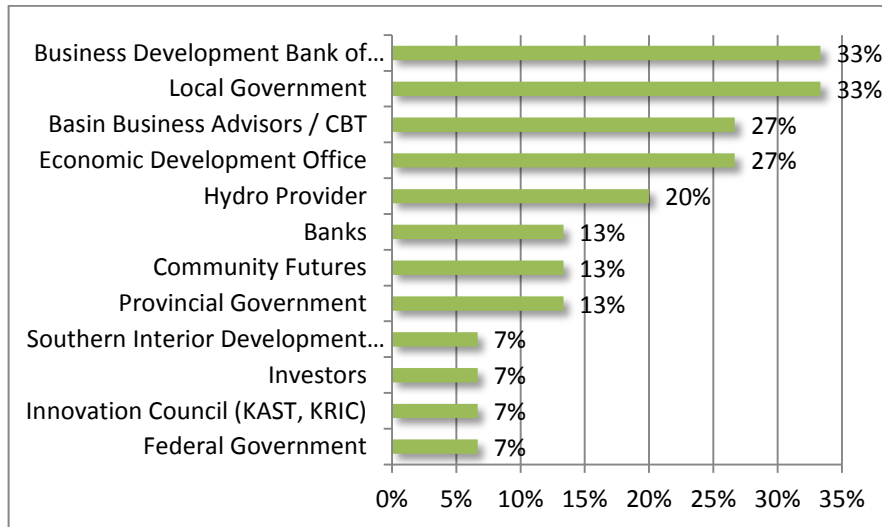
Respondents cited a variety of constraints on expansion. Most popular were identifying and accessing new markets (40%), financing (38%) and a lack of skilled staff (28%).

**Figure 108: Barriers to expansion - Manufacturing sector**



Sixty-one percent of businesses interviewed indicated that they have sought assistance with their expansion plans. Of these respondents, 33% have approached the Business Development Bank of Canada, 33% have approached their local government, 27% have approached Columbia Basin Trust and 27% have approached an Economic Development Officer.

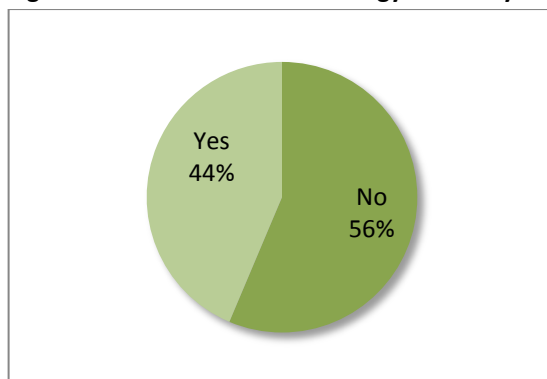
**Figure 109: Organizations approached for expansion assistance - Manufacturing sector**



### *Energy Efficiency*

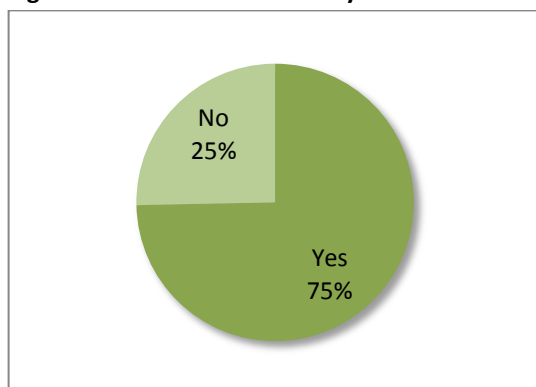
Over half of respondents (56%) have not considered improvements to energy efficiency in their expansion plans.

**Figure 110: Consideration of energy efficiency in expansion plans - Manufacturing sector**



Seventy-five percent of respondents are familiar with BC Hydro Power Smart resources.

**Figure 111: Awareness of BC Hydro Power Smart resources - Manufacturing sector**

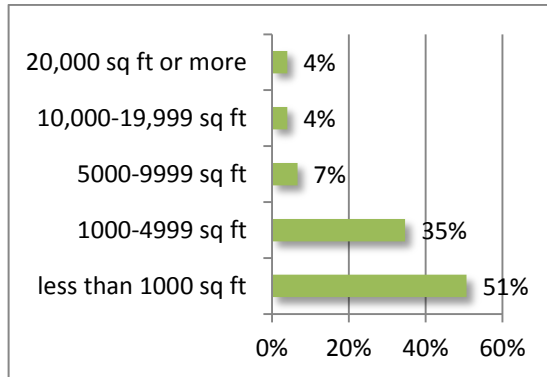


## TECHNOLOGY SECTOR

### *Size and Condition*

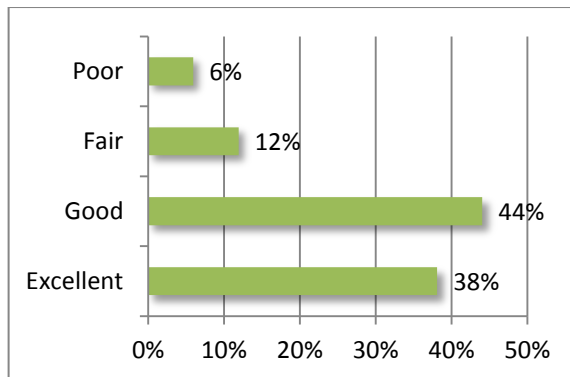
The majority of respondents (51%) indicated that the size of their facility is less than 1,000 square feet. Another 35% reported that their facility is 1,000-4,999 square feet in size.

**Figure 112: Facility size - Technology sector**



Forty-four percent of businesses interviewed indicated that their facility is in good condition. Another 38% indicated that it is in excellent condition.

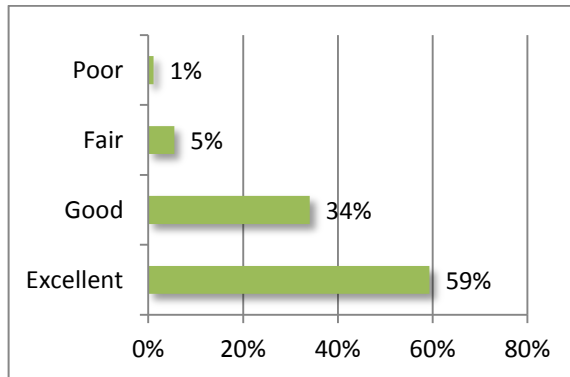
**Figure 113: Condition of facility - Technology sector**



Fifty-nine percent of respondents indicated that their equipment is in excellent condition. Another 34% indicated that it is in good condition. A small percentage (6%) indicated that their equipment is in fair or poor condition.



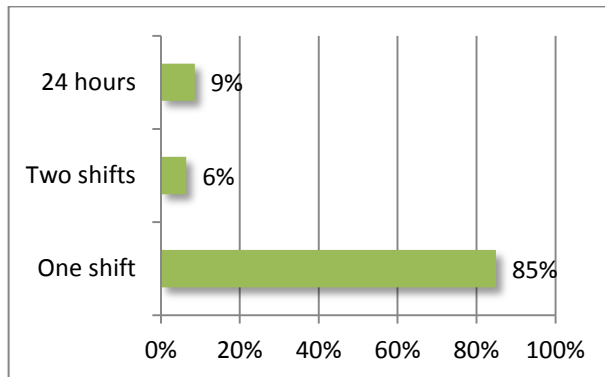
**Figure 114: Condition of equipment - Technology sector**



### *Shifts*

The vast majority of respondents (85%) indicated that their business operates only one shift per day.

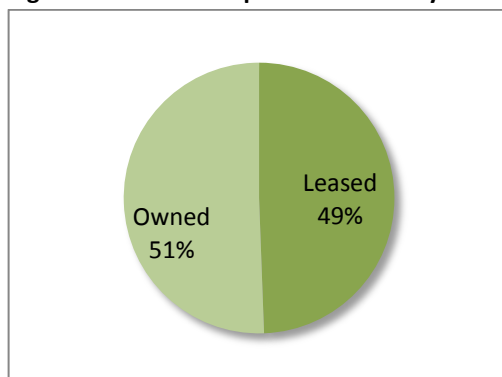
**Figure 115: Number of shifts - Technology sector**



### *Ownership*

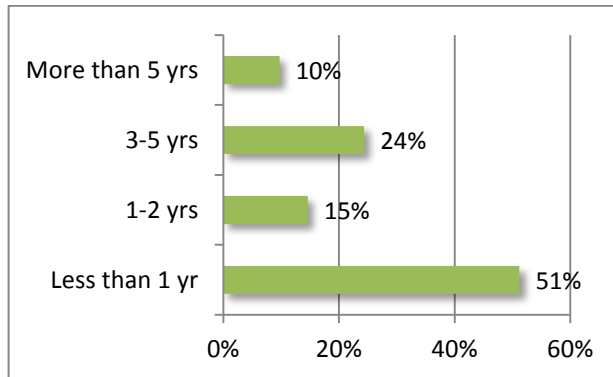
Forty-nine percent of businesses interviewed lease their facility while 51% own it.

**Figure 116: Ownership status of facility - Technology sector**



Of the businesses that are leasing their facility, 51% reported that there is less than a year remaining on the lease. Another 24% reported that between 3 and 5 years remain on the lease. Eighty percent of respondents expect to renew their current lease agreement.

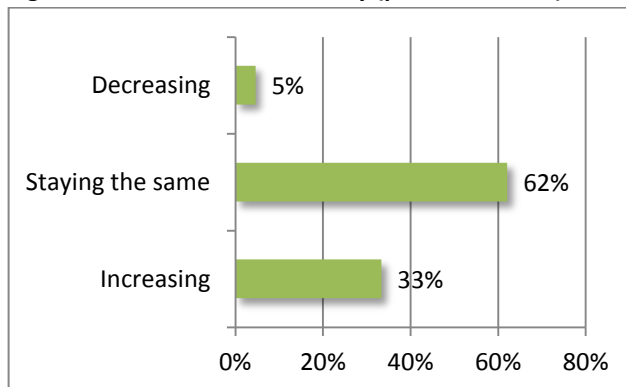
**Figure 117: Length of time remaining on lease - Technology sector**



*Investment and Expansion*

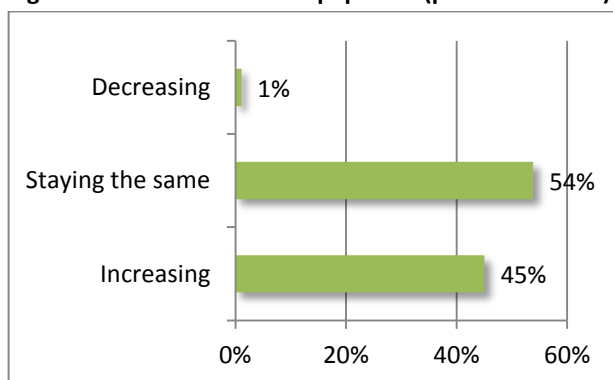
The majority of respondents (62%) indicated that their company's investment in its facility has stayed the same over the last 18 months. Thirty-three percent reported that the level of investment has increased.

**Figure 118: Investment in facility (past 18 months) - Technology sector**



Fifty-four percent of respondents indicated that their company's investment in its equipment has stayed the same over the last 18 months while 45% reported that it has increased.

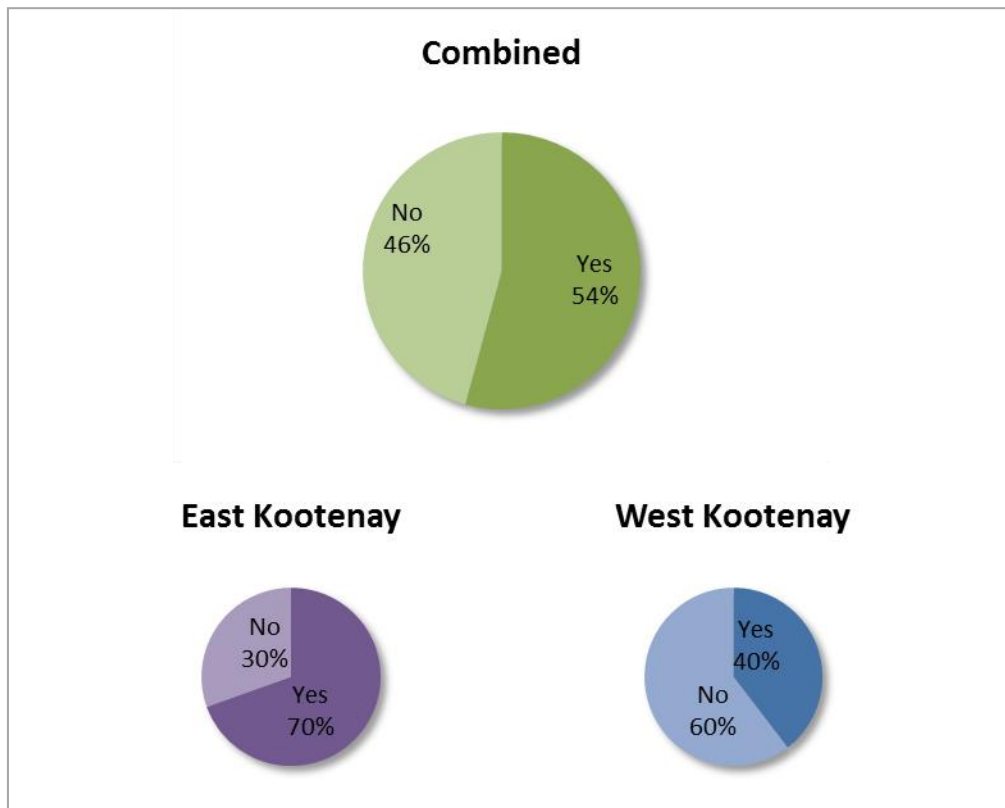
**Figure 119: Investment in equipment (past 18 months) - Technology sector**



As in the manufacturing sector, in the technology sector, considerably more East Kootenay (70%) than West Kootenay (40%) businesses plan to expand within the next three years. As a region, just

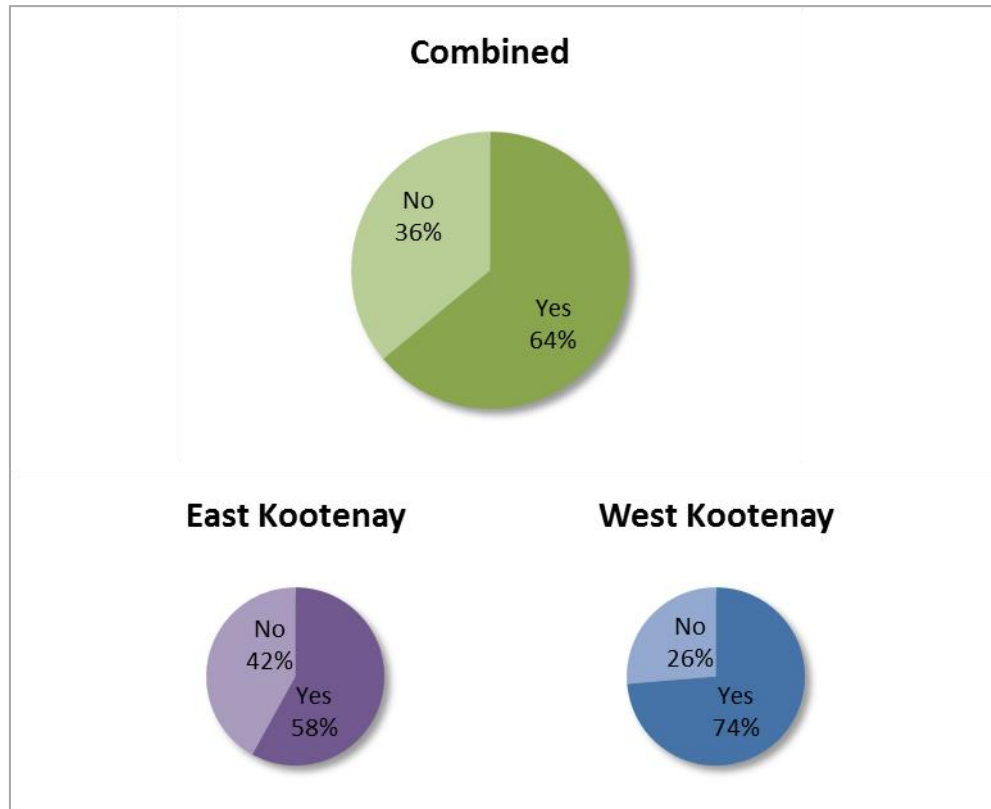
over half (54%) of businesses are planning a near-term expansion. The vast majority of those respondents (94%) expect that their expansion will occur within the community.

**Figure 120: Plans to expand within 3 years - Technology sector**



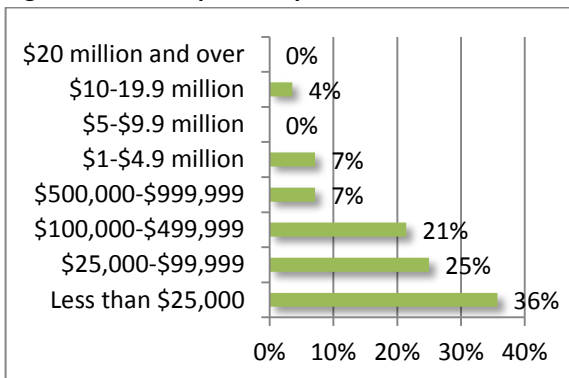
Sixty-four percent of the businesses that are planning to expand reported that their current site is adequate to accommodate the expansion; however, results from East Kootenay and West Kootenay respondents were notably different. Forty-two percent of East Kootenay businesses indicated that their site is not adequate to support future expansion while only 26% of West Kootenay businesses reported the same.

**Figure 121: Adequacy of current site for expansion - Technology sector**



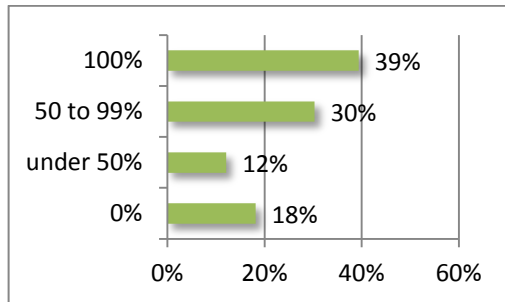
When asked how much businesses were planning to invest in their impending expansion, the highest number of respondents (36%) reported that they will spend less than \$25,000, followed by \$25,000 - \$99,999 (25%) and \$100,000 - \$499,999 (21%).

**Figure 122: Anticipated expansion investment - Technology sector**



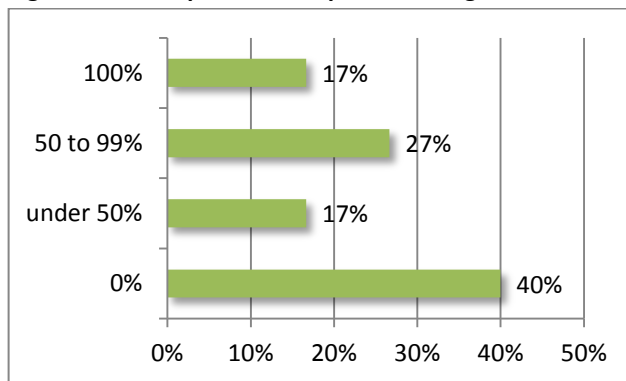
Thirty-nine percent of respondents indicated that 100% of their upcoming expansion budget will be spent on equipment and technology. Another 30% indicated that between 50 and 99% of their expansion budget will be spent on equipment and technology.

**Figure 123: Component of expansion budget for equipment and technology - Technology sector**



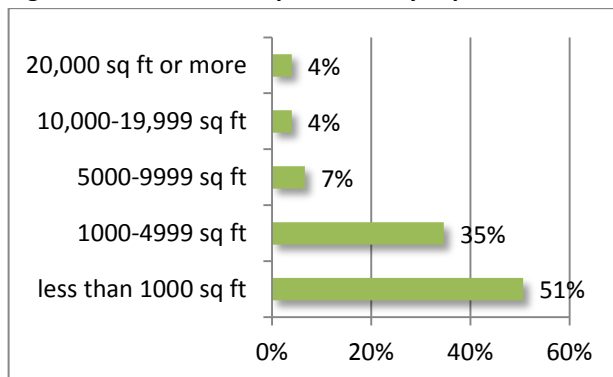
Seventeen percent of respondents indicated that 100% of their upcoming expansion budget will be spent on real estate. Another 40% indicated that 0% of their expansion budget will be spent on real estate.

**Figure 124: Component of expansion budget for real estate - Technology sector**



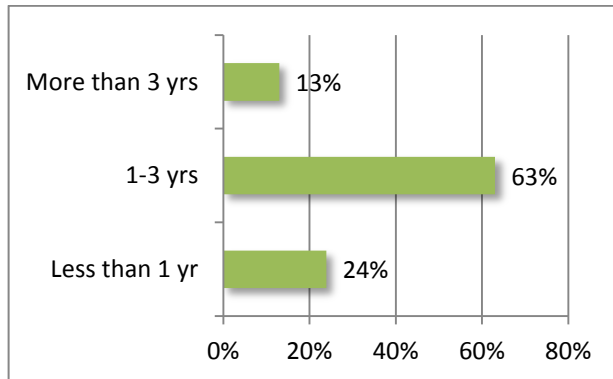
Of the businesses planning a near-term expansion, 51% indicated that their facility is expected to increase in size by less than 1,000 square feet. Another 35% of respondents indicated that their facility is expected to increase in size by between 1,000 and 4,999 square feet.

**Figure 125: Size of anticipated facility expansion - Technology sector**



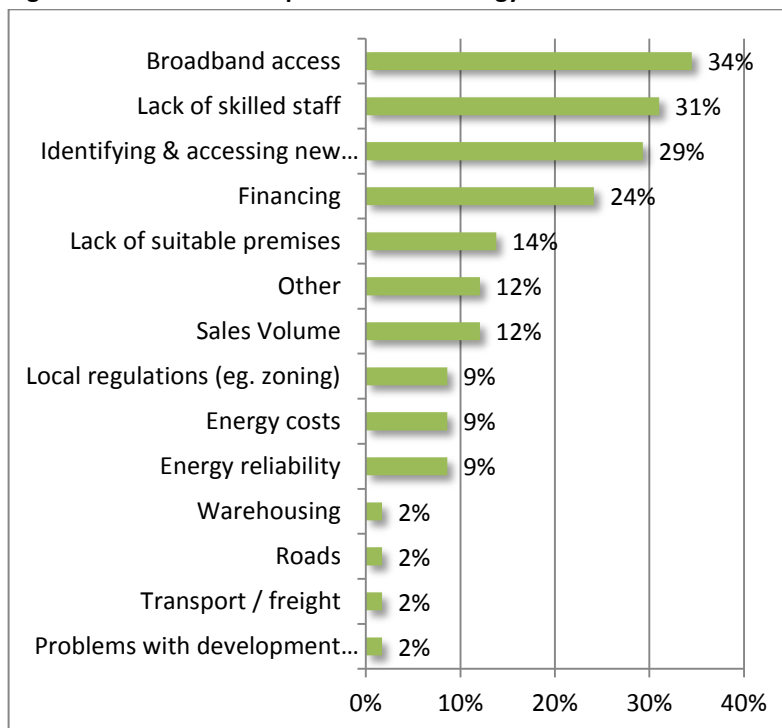
Most businesses planning an expansion (63%) expect to expand within 1-3 years. Twenty-four percent expect the process to be shorter and 13% expect it to be longer.

**Figure 126: Timeframe for expansion - Technology sector**



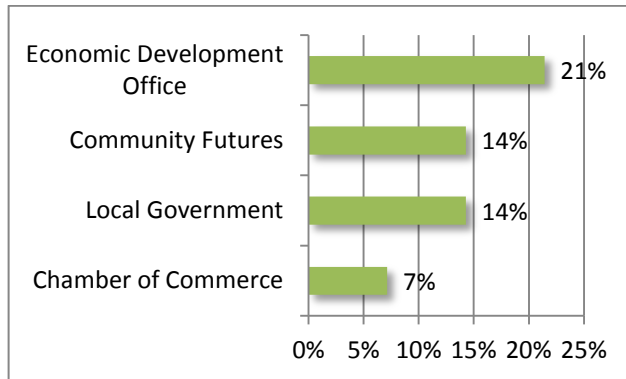
Respondents cited a variety of constraints on expansion. Most popular were broadband access (34%), a lack of skilled staff (31%) and identifying and accessing new markets (29%).

**Figure 127: Barriers to expansion - Technology sector**



Only 20% of respondents indicated that they have sought assistance with their expansion plans. Of those respondents, 21% indicated that they have approached an Economic Development Officer, 14% have approached Community Futures, 14% have approached their local government and 7% have approached their chamber of commerce.

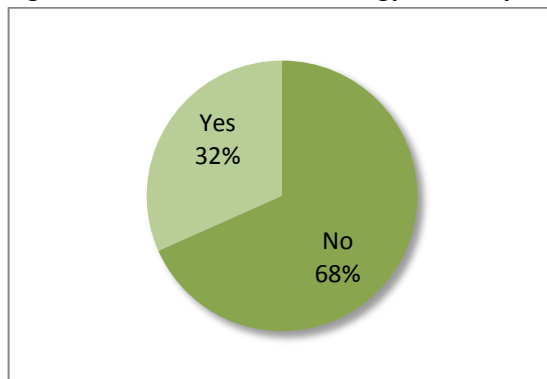
**Figure 128: Organizations approached for expansion assistance - Technology sector**



### *Energy Efficiency*

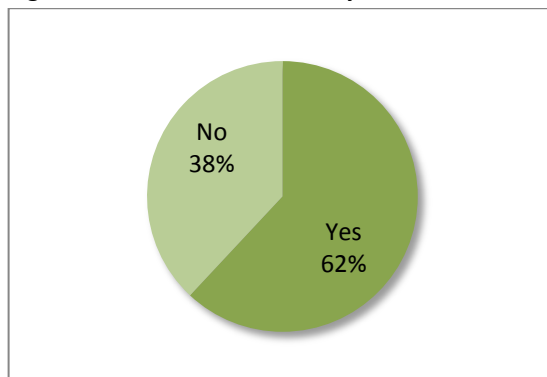
Only 32% of respondents have considered improvements to energy efficiency in their expansion plans.

**Figure 129: Consideration of energy efficiency in expansion plans - Technology sector**



Sixty-two percent of respondents indicated that they are familiar with BC Hydro Power Smart resources available to them. Thirty-eight percent reported that they are not.

**Figure 130: Awareness of BC Hydro Power Smart resources - Technology sector**



### **COMPARISON OF SECTORS**

BRE data from Columbia Basin Boundary manufacturing and technology businesses confirmed that these two sectors often have considerably different needs for their facilities and equipment.

Data indicate that facilities used by manufacturing businesses tend to be larger than those used by technology businesses. The majority of technology businesses (51%) reported that their facility is less than 1000 square feet in size. Only 17% of manufacturing businesses reported the same.

The suitability of facilities for present and future operations appears to be more of an issue in the technology sector than in the manufacturing sector. This finding may be linked to the fact that a higher percent of manufacturing businesses (66% vs. 51%) own their facility. Sixty-four percent of technology businesses believe that their current premises can support expansion, while 76% of manufacturing businesses reported the same. Eighty percent of technology businesses plan on renewing their current lease agreement while 93% of manufacturing businesses reported the same.

Data indicate that investment in facilities and equipment is higher in the manufacturing sector. Fifty-three percent of manufacturing respondents indicated that the level of investment in their facilities has increased over the past 18 months as compared to only 33% of technology respondents. Similarly, 44% of manufacturing respondents indicated that they plan to spend over \$500,000 on their upcoming expansion initiative while only 18% of technology respondents reported the same.

Awareness of external support resources also appears to be higher in the manufacturing sector. Seventy-six percent of manufacturing businesses are aware of BC Hydro Power Smart resources as compared to 64% of technology businesses. Likewise, 61% of manufacturing respondents have sought assistance for their expansion initiative. Only 20% of technology respondents reported the same.

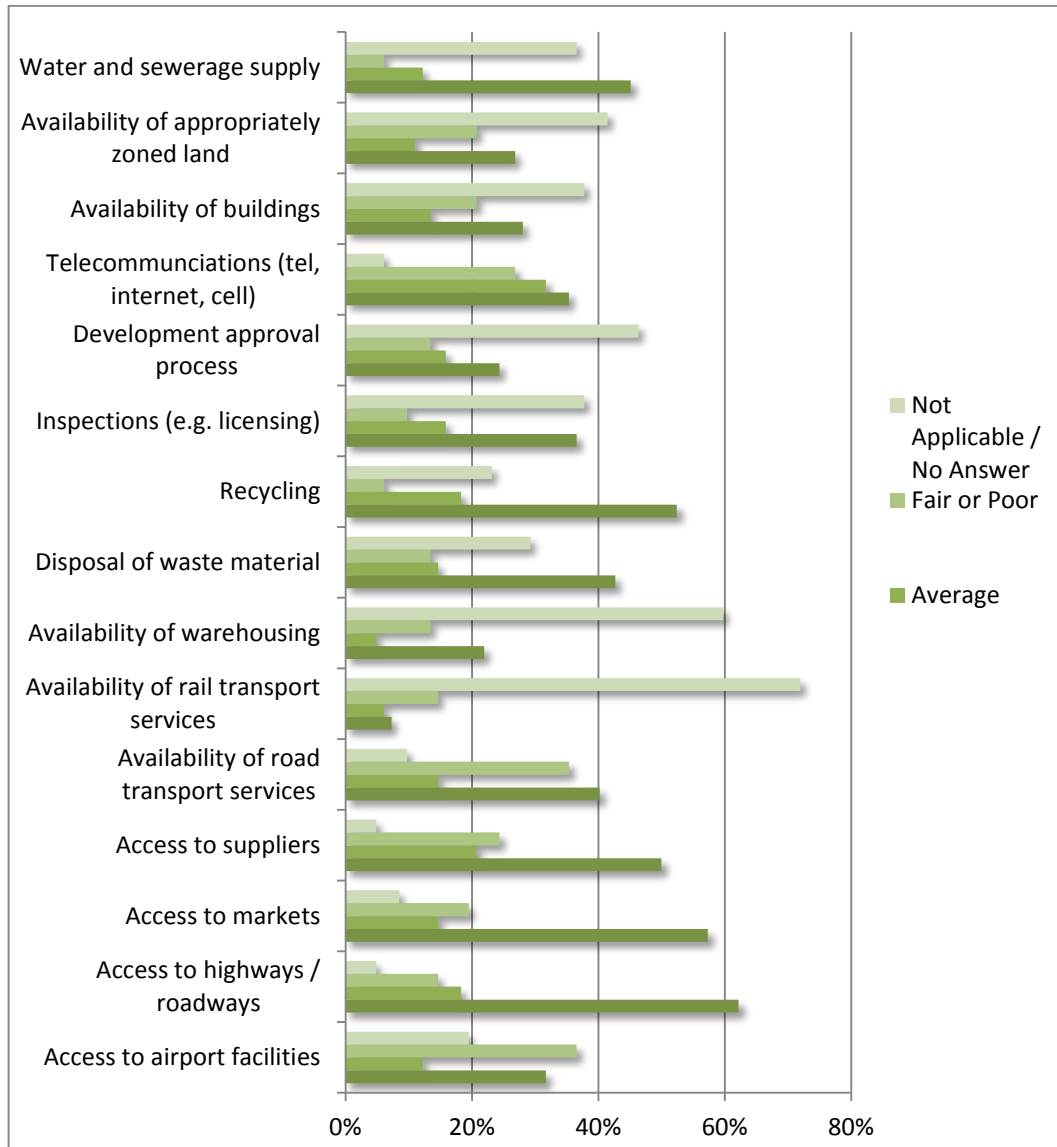
## GOVERNMENT SERVICES

### MANUFACTURING SECTOR

Respondents rated the quality of a list of government services as excellent, good, average, fair or poor. Services that received the highest number of 'excellent' or 'good' ratings include access to highways/roadways (62%), access to markets (57%), recycling (52%) and water and sewerage supply (45%). Services that received the highest number of 'average' ratings include telecommunications (32%), access to suppliers (21%), access to highways/roadways (18%) and recycling (18%). Services that received the highest number of 'fair' or 'poor' ratings include access to airport facilities (37%), availability of road transport services (35%), telecommunications (27%) and access to suppliers (24%). Services that the most respondents felt were not applicable to their business include rail transport services (72%), availability of warehousing (60%), development approval processes (46%) and availability of appropriately zoned land (41%).



**Figure 131: Ratings for government services - Manufacturing sector**



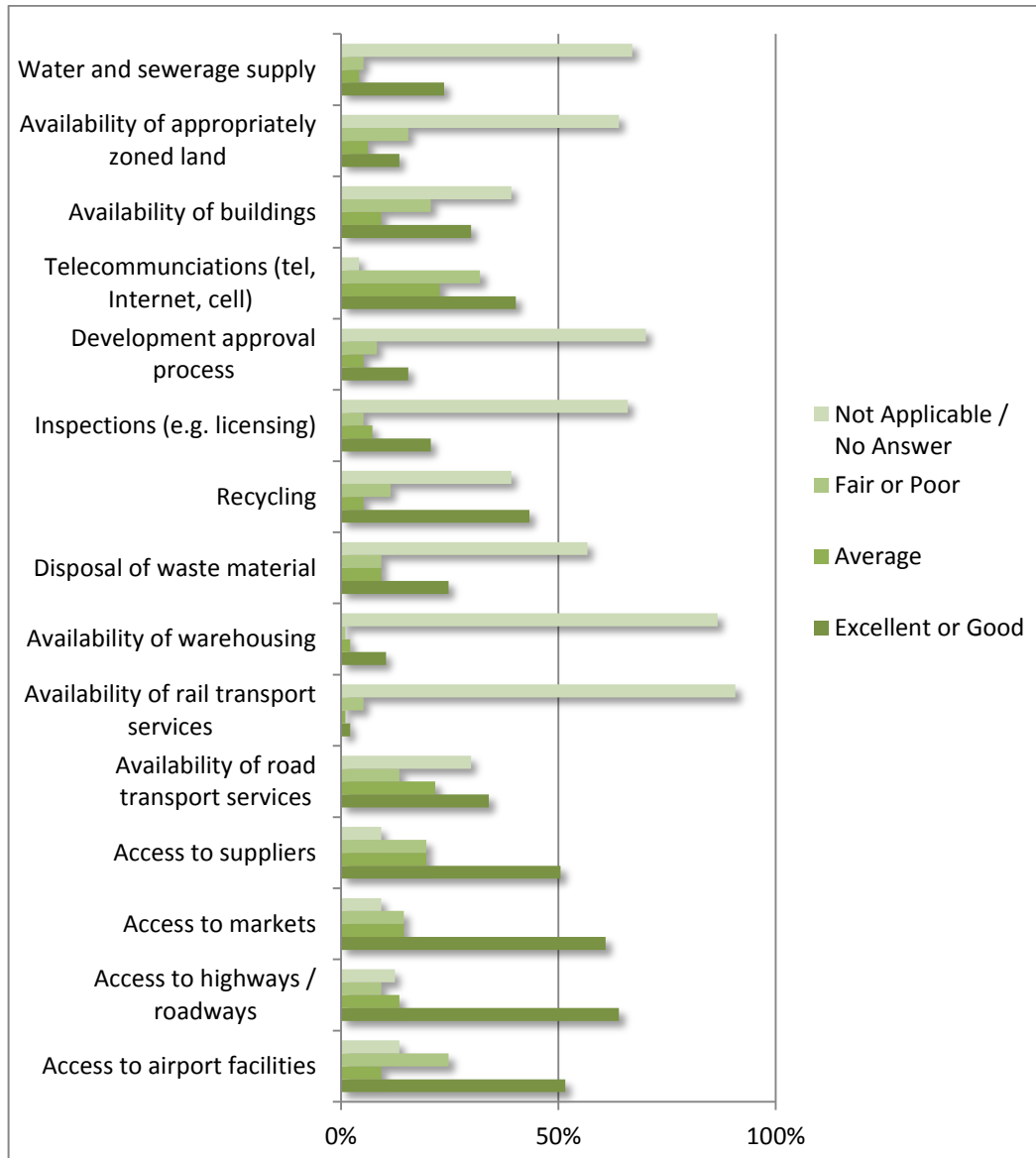
When asked to elaborate on areas of improvement for government services, the highest number of respondents (9) said improvements to shipping and logistics should be a priority. Improvements to broadband and telecommunications also factored heavily (8 respondents) as did improvements to airport services (6 respondents). Multiple respondents also cited improvements to infrastructure (4), more industrial land (2), better signage (2) and lower taxes (2). One respondent's opinion on priority focus areas for local government was characterized through the following excerpt from their survey data:

*"Local governments need to work together and they need to do what is in the best interest of the communities and region as a whole, not just what is best to get them re-elected and to further their own town at the detriment to others."*

[illegible]

Government services that received the highest number of 'good' or 'excellent' ratings by respondents in the technology sector include access to highways/roadways (64%), access to markets (61%), access to airport facilities (52%) and access to suppliers (51%). Services that received the highest number of 'average' ratings include telecommunications (23%), availability of road transport services (22%), access to suppliers (20%) and access to markets (14%). Services that received the highest number of 'fair' or 'poor' ratings include telecommunications (32%), access to airport facilities (25%), availability of buildings (21%) and access to suppliers (20%). Services that the most respondents felt are not applicable to their business include rail transportation services (91%), availability of warehousing (87%), development approval processes (70%) and water and sewerage supply (67%).

**Figure 133: Ratings for government services - Technology sector**



When asked to elaborate on areas of improvement for government services, the highest number of respondents (38), by far, cited improvements to broadband and telecommunications services. Other common themes were improvements to government processes and cooperation (12), improvements to airport reliability (10), improvements to marketing services and skills in the region (3), improvements to infrastructure (3), more modern office space (2) and more industrial/commercial land (2). The following excerpt from one respondent's survey data summarizes how important many businesses believe the availability of a fibre-optic network is to the regional economy.

*"If fibre could be brought in and the lines opened up it would be a world of difference for how the region could grow. If we don't do it soon, the opportunity to get ahead will be lost and it will make it even harder just to catch up to the baseline normal."*

Respondents' evaluations and discussions of government services varied somewhat depending on their sector, but were not surprising given the types of economic activities that manufacturing and technology businesses typically engage in.

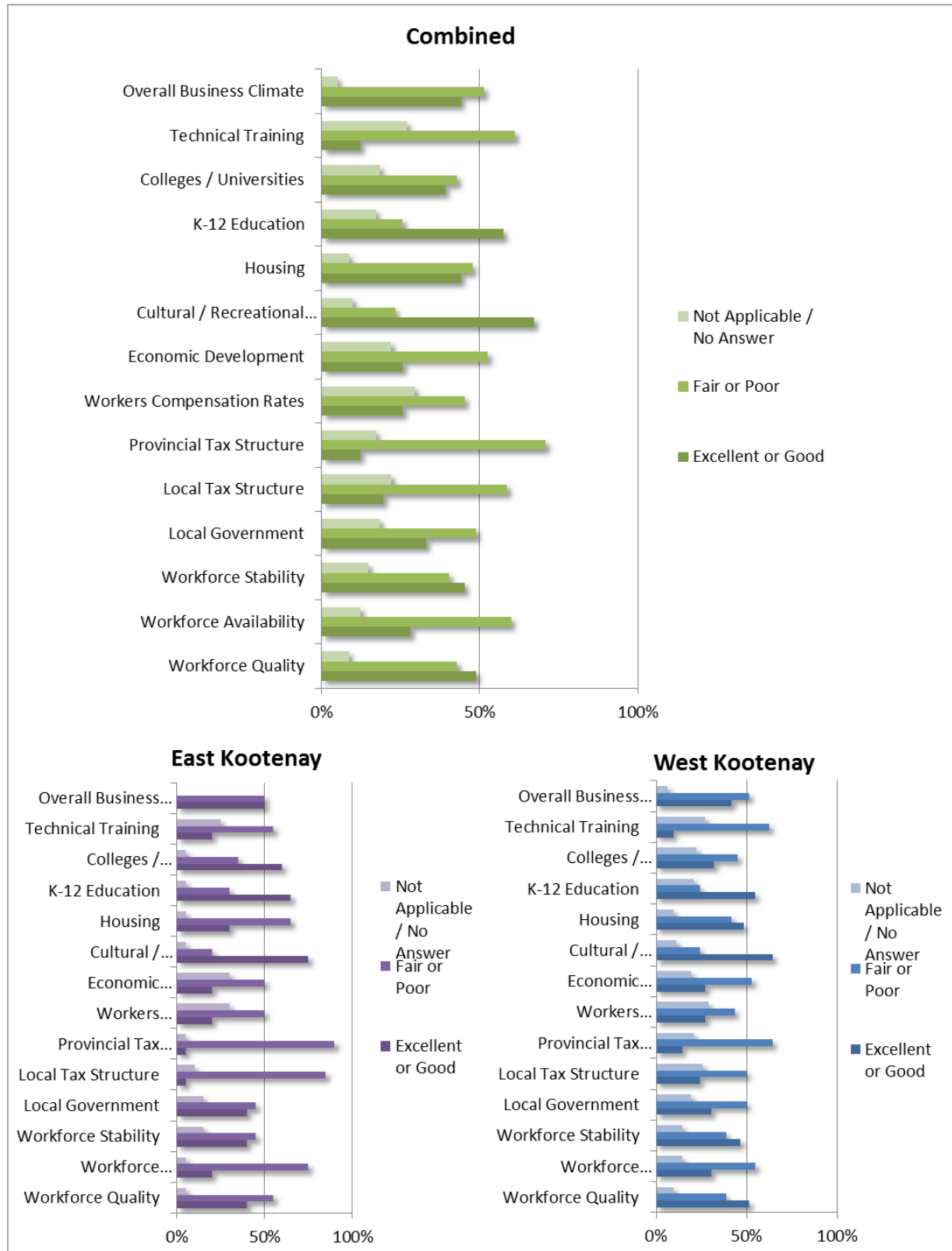
Regardless of inherent differences in the nature of manufacturing and technology businesses, the two sectors agreed to a considerable extent on their evaluation of many government services. For example, respondents in both sectors generally agreed that access to highways and roadways in the region is excellent, as is access to markets and suppliers. Both sectors listed availability of warehousing and availability of rail transport services as generally not applicable to their business activities. Several respondents from both sectors also stressed the importance of improvements to airport reliability to the regional economy.

## MANUFACTURING SECTOR

Respondents rated the status of a number of business climate factors as excellent, good, fair or poor. As a region, 44% of businesses ranked the overall business climate as good or excellent and 51% ranked it as fair or poor. Factors that received the highest number of good or excellent ratings include cultural/recreational amenities (67%) and K-12 education (57%). Factors that received the highest number of fair or poor ratings include the provincial tax structure (71%) and technical training (61%). Factors that differed notably across the subregions include the local tax structure and housing. Eighty-five percent of East Kootenay businesses rated the local tax structure as fair or poor. Only 50% of West Kootenay respondents reported the same. Sixty-five percent of East

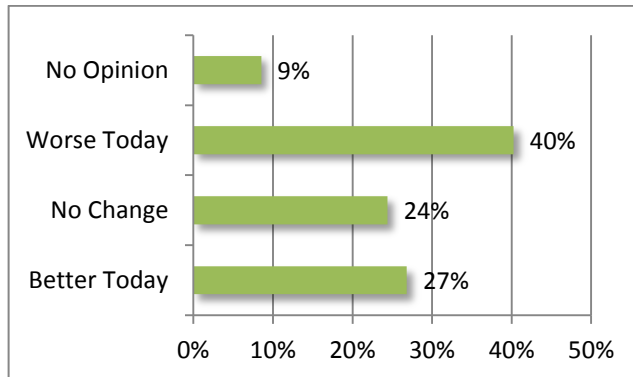
Kootenay respondents, as compared to 42% of West Kootenay respondents, rated housing as fair or poor.

**Figure 135: Business climate factors - Manufacturing sector**



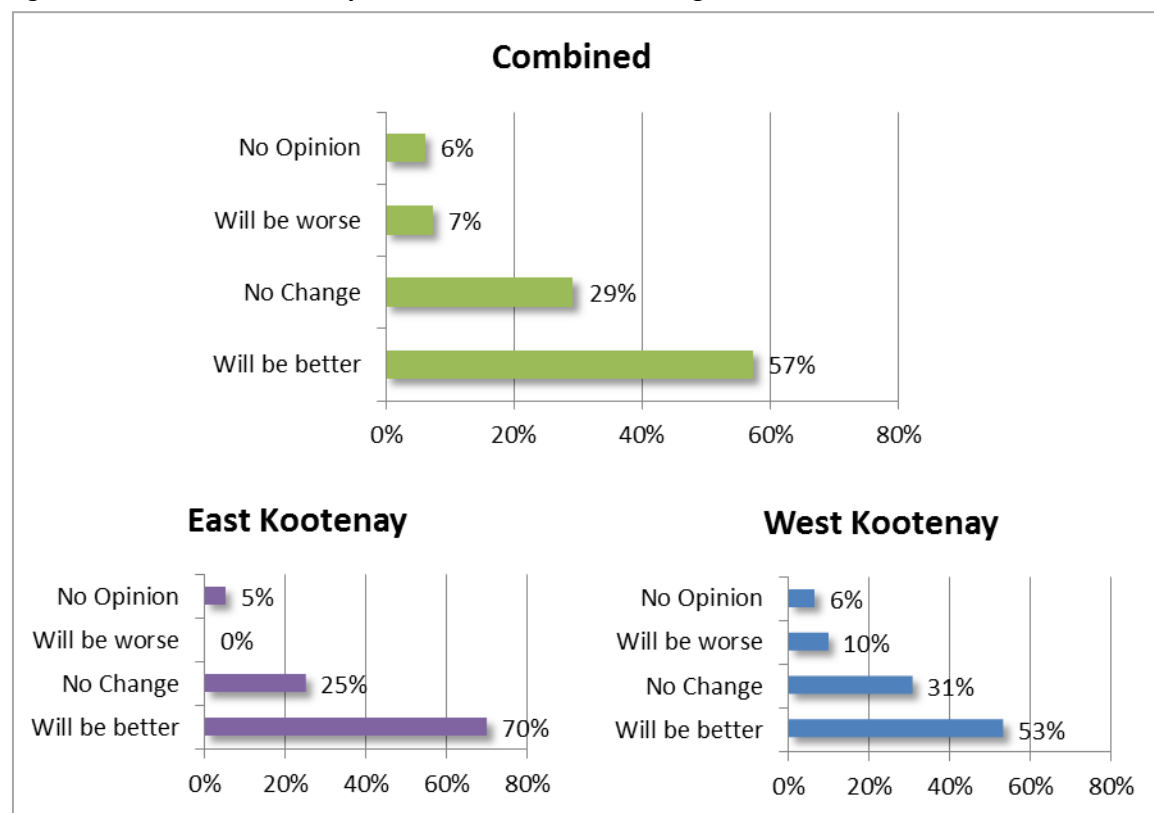
Forty percent of businesses interviewed indicated that, in their opinion, the local business climate is worse today than it was 5 years ago while 27% believed it is better.

**Figure 136: Business climate today vs. 5 years ago - Manufacturing sector**



East Kootenay respondents had a more positive forecast for the business climate 5 years from now than did West Kootenay respondents. Ten percent of West Kootenay respondents believed that the business climate will be worse as compare to 0% of East Kootenay respondents. Fifty-three percent of West Kootenay respondents believed the business climate will be better as compared to 70% of East Kootenay respondents.

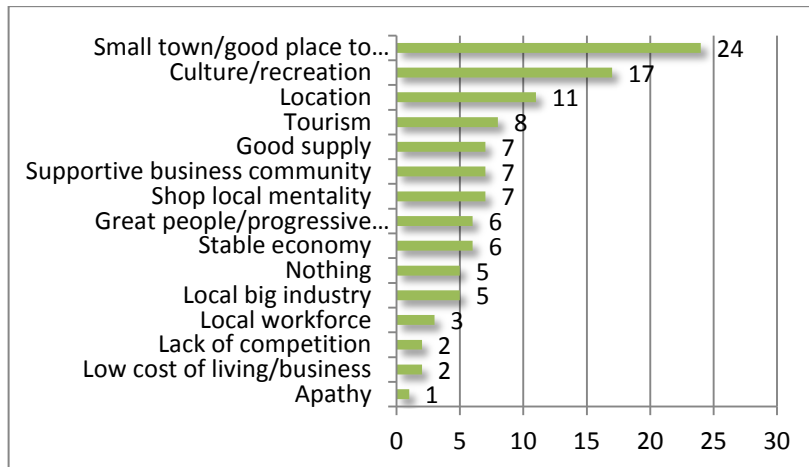
**Figure 137: Business climate 5 years from now - Manufacturing sector**



### Strengths and Weaknesses of Business Climate

When asked about the region's strengths as a place to do business, East and West Kootenay businesses agreed that the lifestyle and small town nature of Columbia Basin Boundary communities is most important, with 11 and 13 respondents citing this factor, respectively. West Kootenay businesses believed that culture and recreational opportunities are the second most important factor, with 13 businesses discussing this issue. East Kootenay businesses, on the other hand, believed that tourism is the second most important factor, with 6 businesses discussing this issue.

**Figure 138: Community's strengths as a place to do business - Manufacturing sector**



When asked about the region's weaknesses as a place to do business, respondents most often cited location and logistics (29), followed by workforce availability (15) and a small market (14). The importance of location was highlighted in the following excerpt from one respondent's survey data:

*"Geography. The distance from his suppliers means greater shipping costs for his supplies cutting into profit margins or raising prices to customers. Freight costs have doubled in the last 10 years for them."*



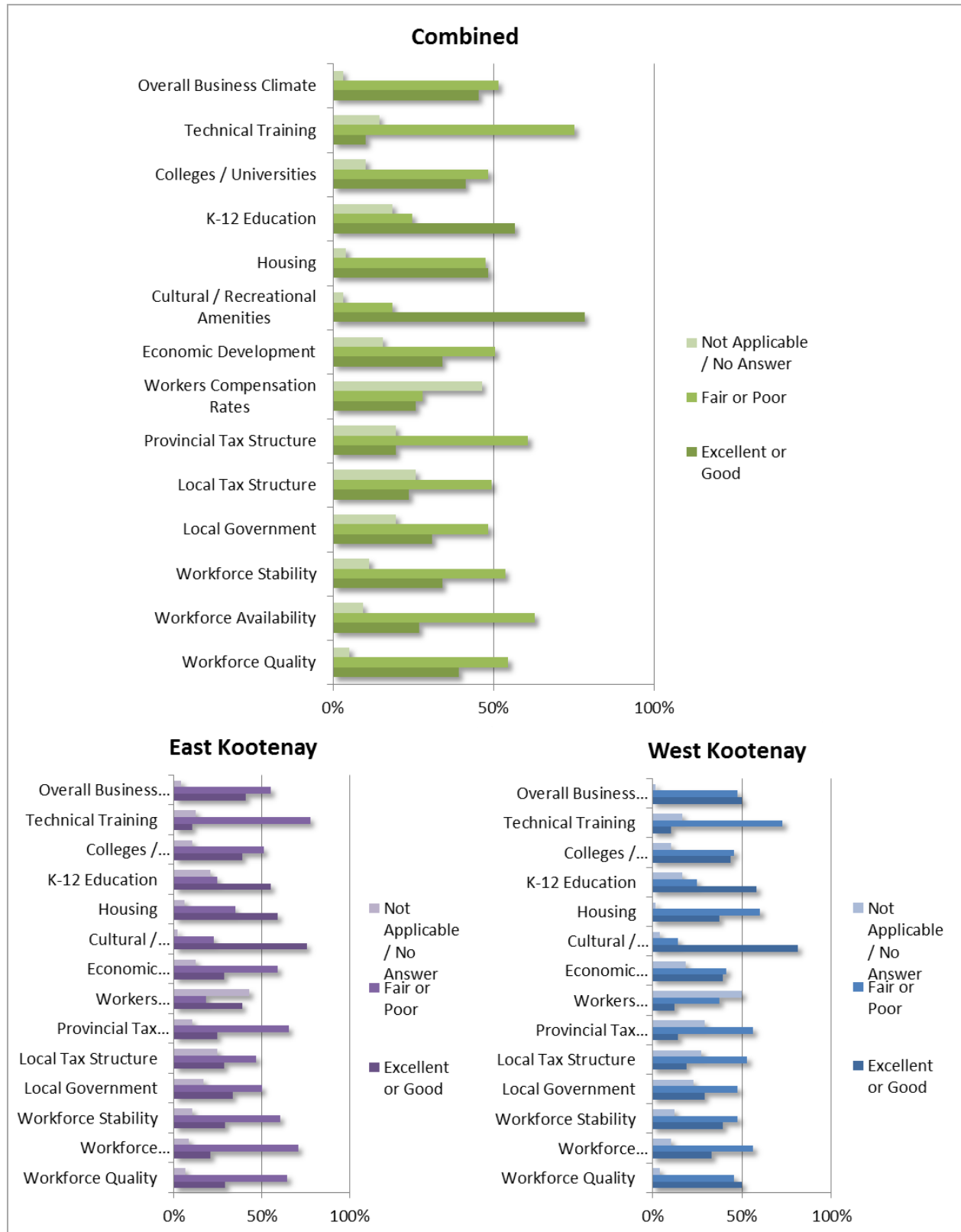


## TECHNOLOGY SECTOR

### *Quality of Business Climate*

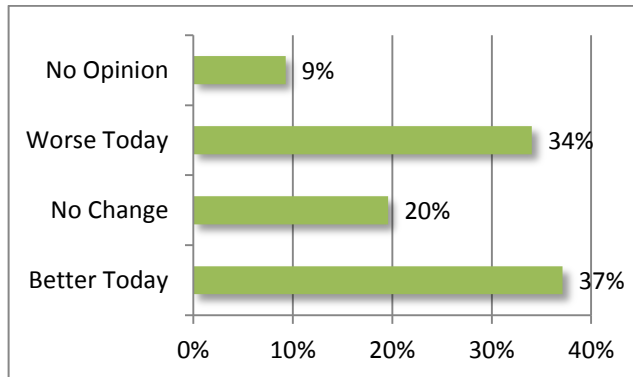
As a region, 45% of technology business rated the overall business climate as good or excellent and 52% rated it as fair or poor. Factors that received the highest number of good or excellent ratings include culture and recreational amenities (78%) and K-12 education (57%). Factors that received the highest number of fair or poor ratings include technical training (75%) and workforce availability (63%). Factors that differ most between the East and West Kootenay subregions include workforce quality and housing. Twenty-nine percent of East Kootenay respondents rated workforce quality as good or excellent. Fifty percent of West Kootenay respondents reported the same. Thirty-five percent of East Kootenay respondents, as compared to 60% of West Kootenay respondents, rated housing as fair or poor.

**Figure 141: Rating of business climate factors - Technology sector**



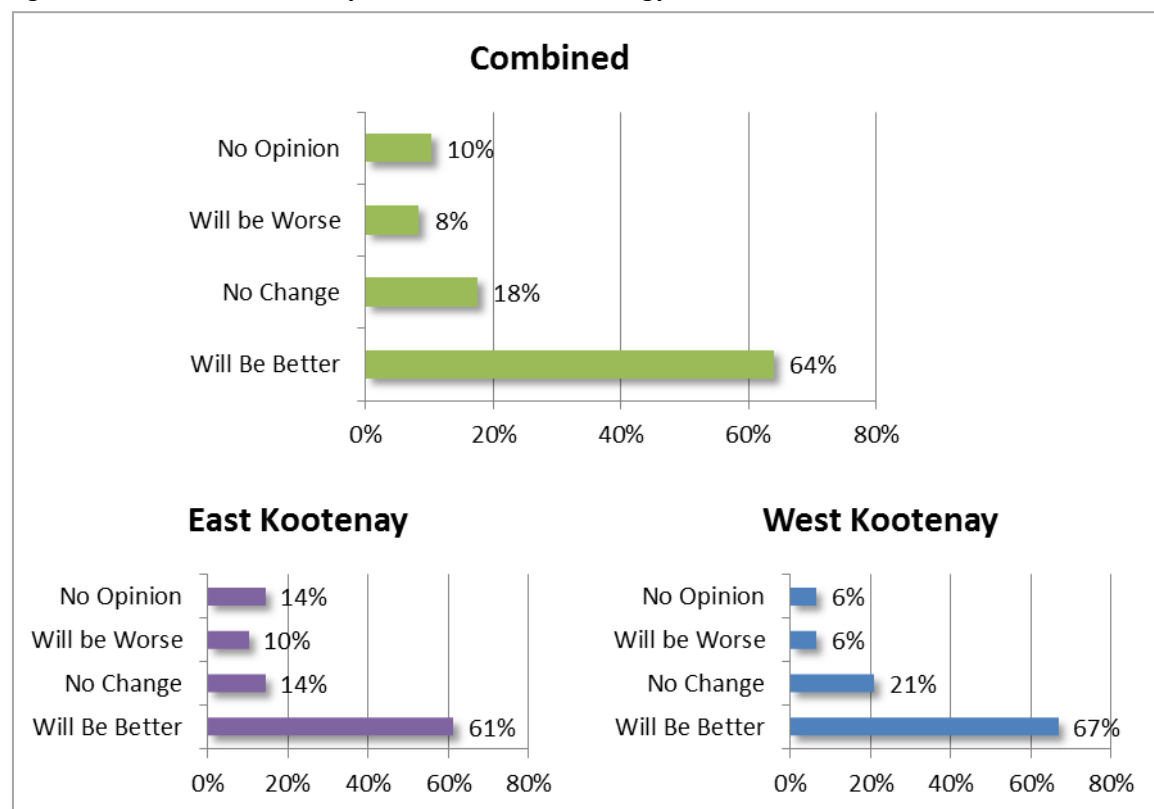
Thirty-seven percent of respondents believe that the business climate is better today than 5 years ago. Thirty-four percent believe it is worse.

**Figure 142: Business climate today vs. 5 years ago - Technology sector**



Businesses in the West Kootenay subregion were slightly more optimistic than East Kootenay businesses when forecasting the business climate 5 years from now. Ten percent of East Kootenay respondents believe the business climate will be worse as compared to 6% of West Kootenay respondents. Sixty-one percent of East Kootenay respondents believe the business climate will be better as compared to 67% of West Kootenay respondents.

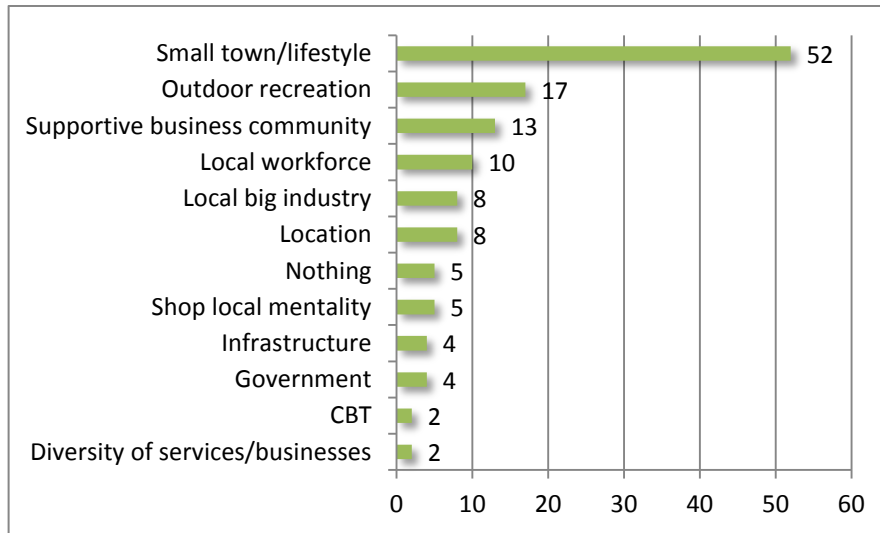
**Figure 143: Business climate 5 years from now - Technology sector**



### *Strengths and Weaknesses of Business Climate*

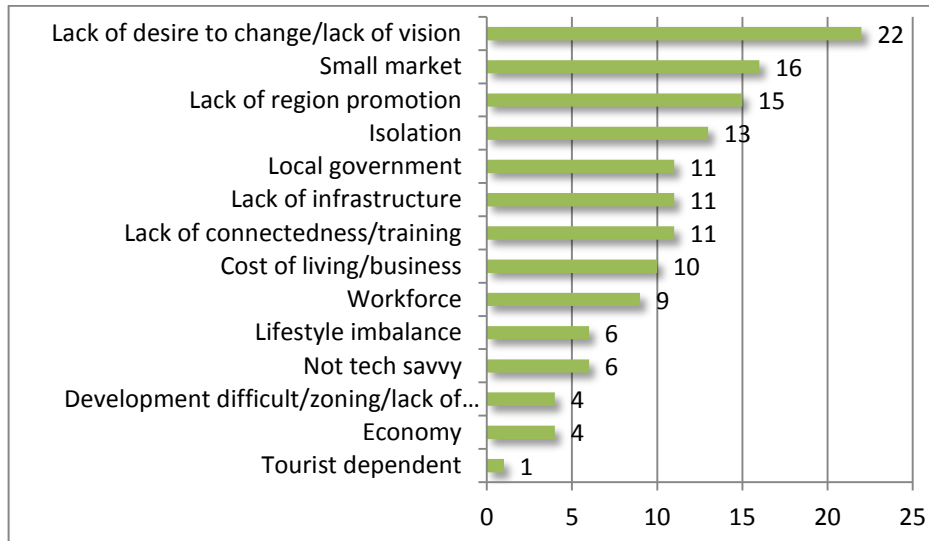
When asked about the community's strengths as a place to do business, East and West Kootenay respondents agreed that the lifestyle and small town nature of the region is the most important, with 21 and 26 respondents citing this factor, respectively. East Kootenay businesses listed the supportive business community as the second most important factor, with 12 respondents discussing this issue. West Kootenay businesses noted that outdoor recreation opportunities are the second most important factor, with 6 respondents discussing this issue.

**Figure 144: Community's strengths as a place to do business - Technology sector**



When asked about the community's weaknesses as a place to do business, again, East and West Kootenay respondents agreed on the most important factor. Eleven East Kootenay businesses and 11 West Kootenay businesses listed a lack of desire to change/grow or a lack of direction/vision as a weakness in the region. East Kootenay businesses cited a small market as the second most important factor (9 respondents), whereas West Kootenay businesses discussed a failure to promote the region (8 respondents).

**Figure 145: Community's weaknesses as a place to do business - Technology sector**



Eighty-six percent of respondents indicated that there are barriers to growth in the community in which they operate. Of these respondents, 25 identified the small population/market as an issue, fourteen cited a lack of infrastructure, 12 cited the cost of living/business and 12 cited an anti-growth mindset. Other commonly cited factors included a lack of training/education/networking (9), difficulties with doing business/government (9), a lack of promotion for the region (9) and workforce availability (8). One respondents' response to this question illustrated an interesting approach to viewing the economic nature of the region:

*"It's all a matter of having a positive attitude. In too many cases there are poor or negative attitudes towards business or growth that hold the area back. Many of the things that are seen as negatives like location and population base can just as easily be looked at as positives and advantages if we align our attitudes properly and promote the positives of what we can do here and what we have , rather than what we can't and what we don't have."*

Twenty-seven percent of respondents indicated that it is important to attract certain suppliers to the area. Most commonly listed were computer/software retail businesses (6 respondents) and web hosting/data centres (3 respondents).

Sixty-seven percent of businesses indicated that it is important to attract certain customers to the area. Important themes introduced by respondents when answering this question include telecommuters (10 respondents), more population with money (8), lifestyle migrants (5), creative/PR workers (4) and tech/IT customers (4).

**Figure 146: Key words in respondents' discussions of customers to attract to the region.**



## COMPARISON OF SECTORS

The sectors generally agreed on their assessment of the current business climate in the region. About 45% of respondents in both sectors rated the overall business climate as good or excellent and about 50% rated it fair or poor. There was also some agreement on the individual business climate factors that respondents in each sector rated as good or bad. The sectors agreed that culture/recreational amenities are very strong, as is K-12 education. Technical training was commonly cited as a weak point by respondents in both sectors. Among both manufacturing and technology businesses, the subregions disagreed on the quality of the housing stock, though the location of the housing issue differed depending on the sector. In the manufacturing sector, more East Kootenay businesses rated housing as fair or poor whereas in the technology sector, more West Kootenay businesses rated housing as fair or poor.

The sectors agreed that the lifestyle and small town nature of communities in the region are the most important strengths of this area as a place to do business. Likewise, the sectors agreed that a lack of desire to grow or change is an important barrier to growth in this region.

Businesses in the technology sector displayed a lower degree of subregional variation with regard to future business climate projections than businesses in the manufacturing sector. Amongst manufacturing businesses, a difference of 17 percentage points separated East (70%) and West (53%) Kootenay businesses that believe the business climate will be better 5 years from now. In the technology sector, that difference was just 6 percentage points (61% of East Kootenay businesses as compared to 67% of West Kootenay businesses.)

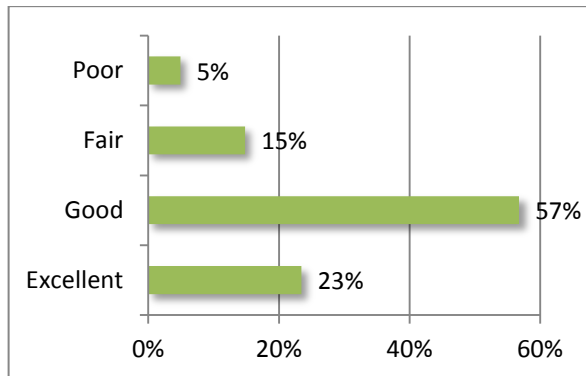
## ASSESSMENT AND PLANS

### MANUFACTURING SECTOR

#### *Overall Health*

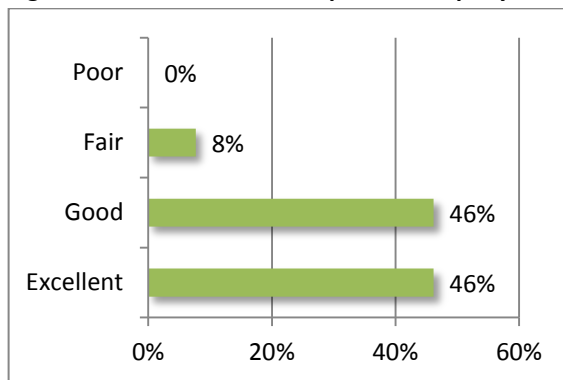
The majority of respondents (57%) reported that their business is in overall good health. Another 23% reported that the overall health of their business is excellent.

**Figure 147: Overall health of business - Manufacturing sector**



Of the respondents that operate under a parent company, 46% indicated that the overall health of their parent company is excellent and another 46% indicated that it is good.

**Figure 148: Overall health of parent company - Manufacturing sector**

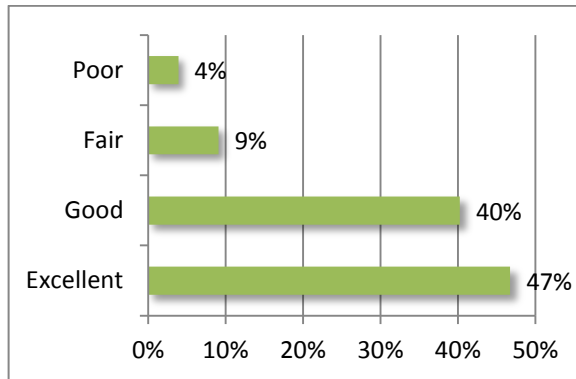


#### *Attitude toward Community*

When asked about local management's attitude toward the community, 47% reported that it is excellent and 40% reported that it is good. Thirteen percent reported that it is fair or poor.

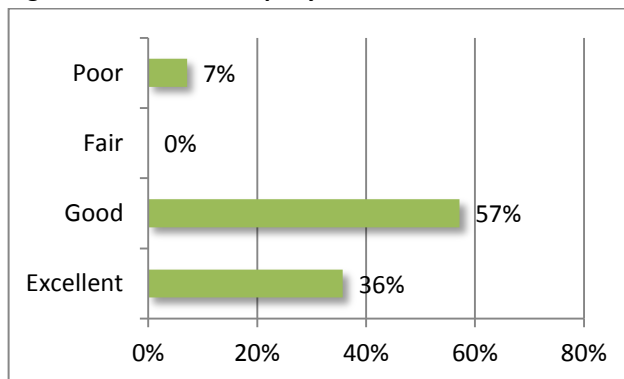


**Figure 149: Local management's attitude toward community - Manufacturing sector**



Respondents reported that their parent company's attitude toward the community is slightly less positive than local management's. Fifty-seven percent of respondents indicated that it is good and 36% indicated that it is excellent.

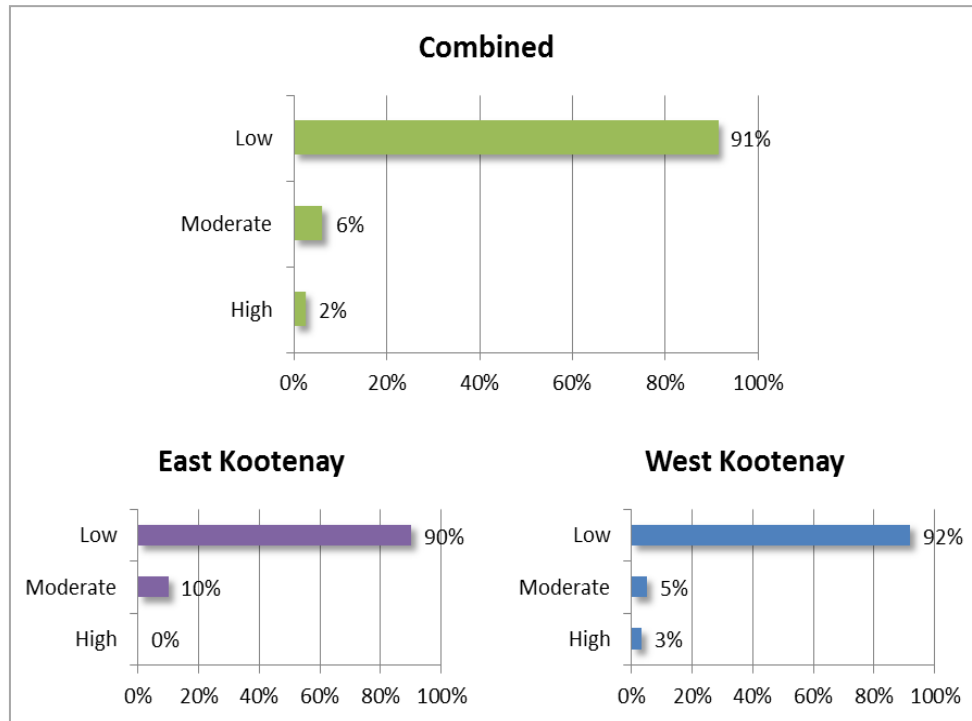
**Figure 150: Parent company's attitude toward community - Manufacturing sector**



#### *Risk of Closing or Downsizing*

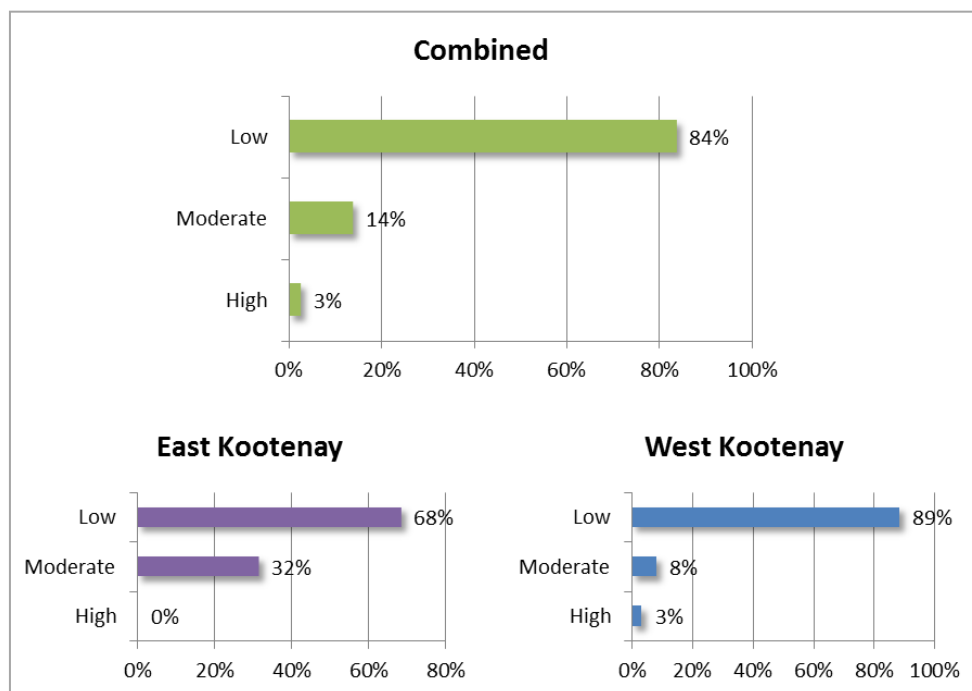
The vast majority of respondents (91% across the region) indicated that the risk of their facility closing is low; however, 3% of West Kootenay businesses reported a high risk of closing and 10% of East Kootenay businesses reporting a moderate risk of closing.

**Figure 151: Risk of facility closing - Manufacturing sector**



The risk of downsizing reported by respondents was higher than the risk of closing. As a region, 84% reported that the risk is low; however, East Kootenay businesses reported a much higher level of risk than West Kootenay respondents. Thirty-two percent of East Kootenay respondents are at a moderate risk of downsizing compared to just 8% of West Kootenay respondents.

**Figure 152: Risk of facility downsizing - Manufacturing sector**

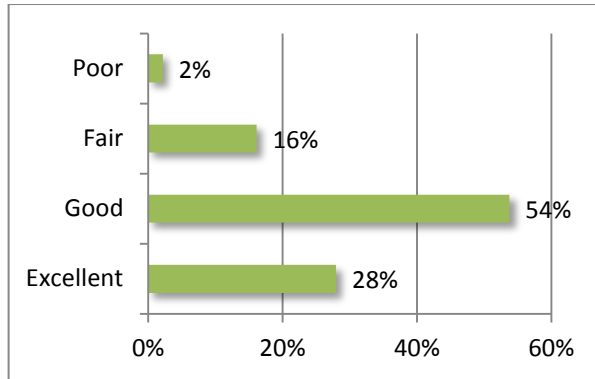


## TECHNOLOGY SECTOR

### Overall Health

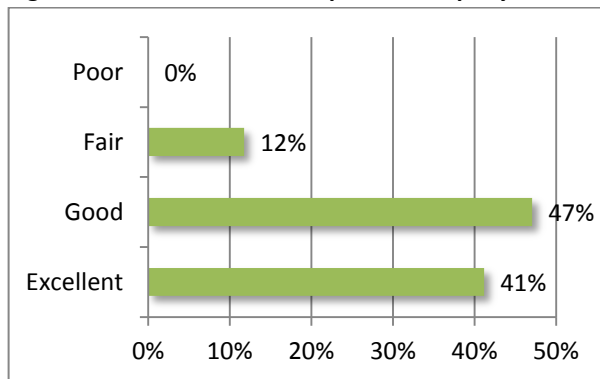
Fifty-four percent of respondents rated the overall health of their business as good. Another 28% rated it as excellent.

**Figure 153: Overall health of business - Technology sector**



Of the businesses that operate under a parent company, 47% reported that the overall health of their parent company is good and 41% reported that it is excellent.

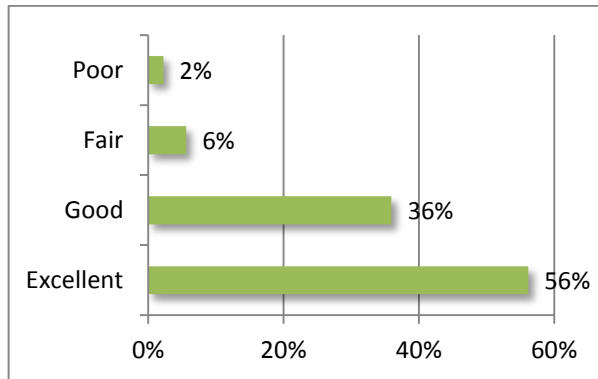
**Figure 154: Overall health of parent company - Technology sector**



### Attitude toward Community

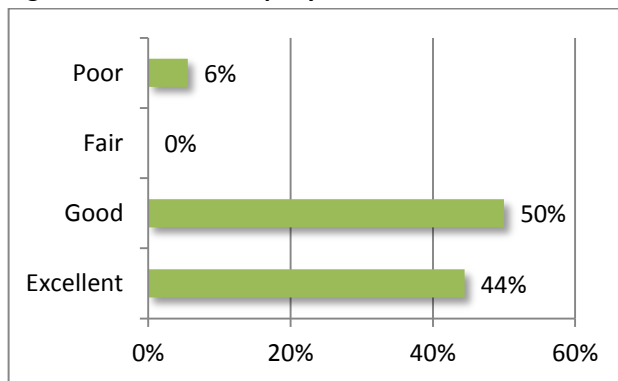
When asked about local management's attitude toward the community, 56% reported that it is excellent and 36% reported that it is good. Only 8% reported that it is fair or poor.

**Figure 155: Local management's attitude toward community - Technology sector**



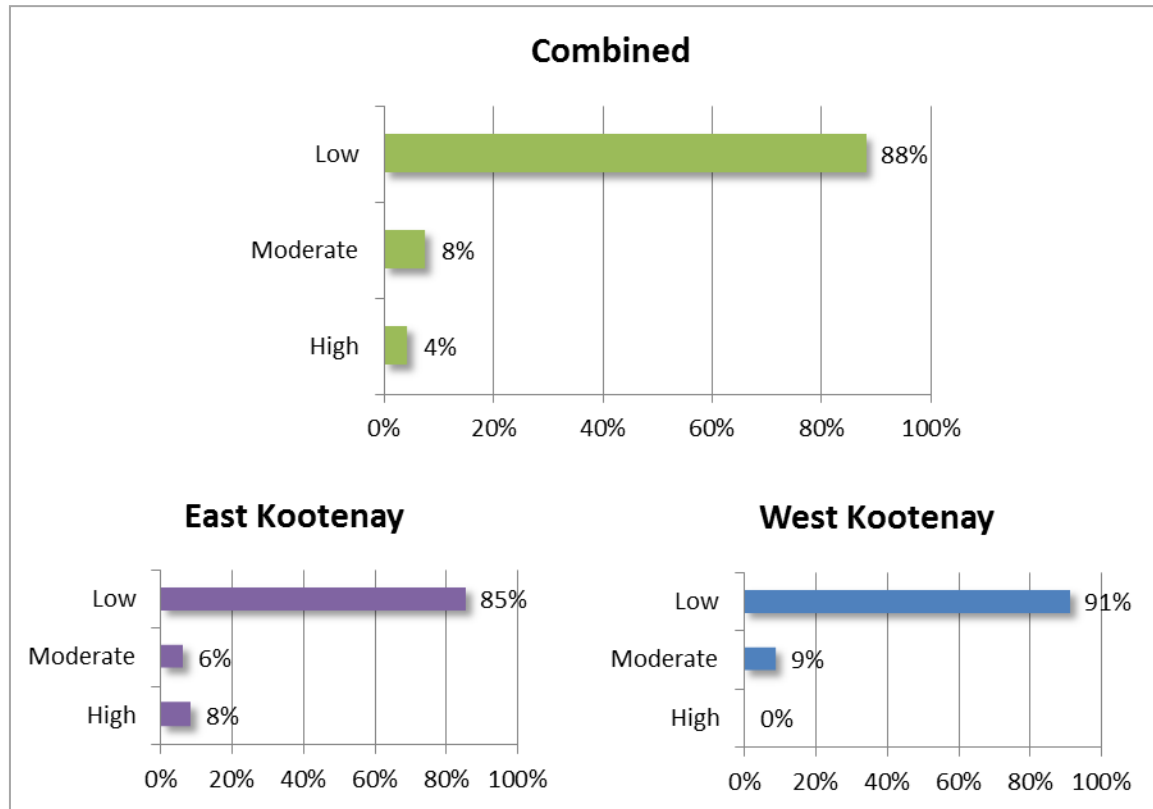
Respondents indicated that their parent company's attitude toward the community is slightly less positive than local management's. Fifty percent of respondents indicated that it is good and 44% indicated that it is excellent.

**Figure 156: Parent company's attitude toward community**



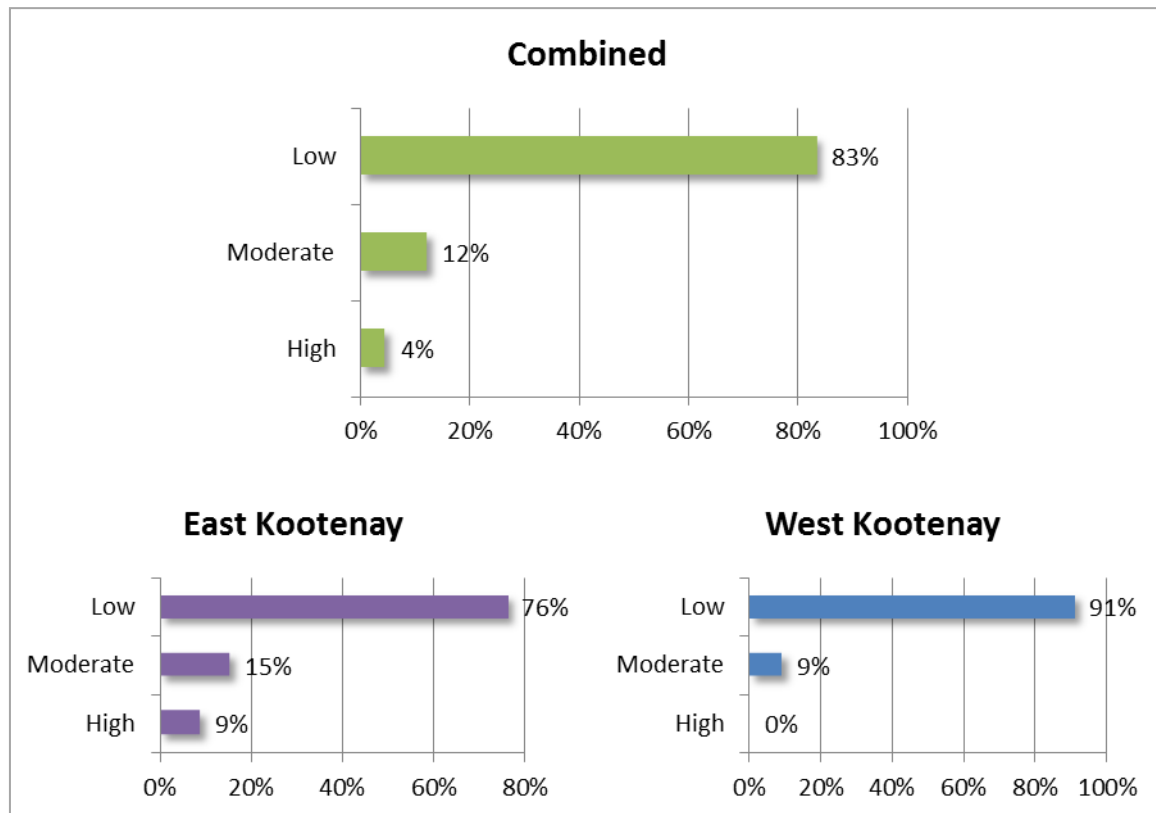
As a region, 88% of businesses interviewed indicated that the risk of their facility closing is low, 8% indicated that it is moderate and 4% indicated that it is high. The risk of facility closure was higher among East Kootenay respondents. Eighty-five percent of East Kootenay businesses rated their risk of closure as low as compared to 91% of West Kootenay businesses. Similarly, 8% of East Kootenay businesses rated their risk of closure as high. No West Kootenay respondents reported the same.

**Figure 157: Risk of facility closing - Technology sector**



Eighty-three percent of businesses across the region indicated that the risk of their facility downsizing is low. Again, however, the level of risk was higher among East Kootenay businesses than West Kootenay businesses. Ninety-one percent of West Kootenay respondents indicated that their risk of downsizing is low as compared to just 76% of East Kootenay respondents. Similarly, 0% of West Kootenay businesses reported that their risk of downsizing is high as compared to 9% of East Kootenay businesses.

**Figure 158: Risk of facility downsizing - Technology sector**



### COMPARISON OF SECTORS

Data for this short module of the BRE survey revealed only a few notable differences between responses recorded for manufacturing and technology businesses.

Local management's attitude toward the community appeared to be more positive in the technology sector as compared to the manufacturing sector. Fifty-six percent of technology businesses reported that their management's attitude toward the local community is excellent. Only 47% of manufacturing businesses reported the same.

Similarly, data indicate that parent companies' attitudes towards the community are higher in the technology sector than in the manufacturing sector. Forty-four percent of technology respondents, as compared to 26% of manufacturing respondents, reported that their parent company's attitude toward the community is excellent.

### ISSUES OF REGIONAL INTEREST

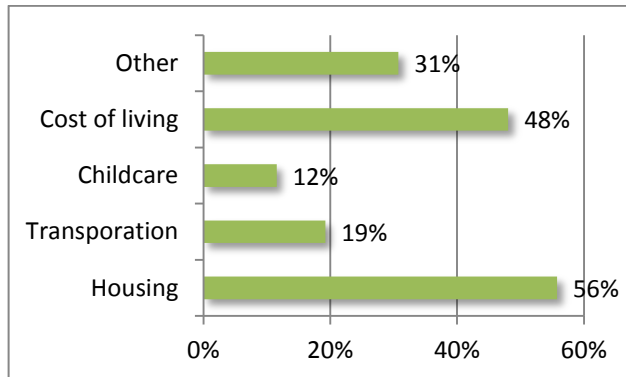
#### MANUFACTURING SECTOR

##### *Employees*

A majority of respondents in the manufacturing sector (56%) listed housing as an issue that is critical to employees. Many respondents (48%) also cited the cost of living as an important issue. Common answers included in the 'other' category illustrated in the graph below include lifestyle (5

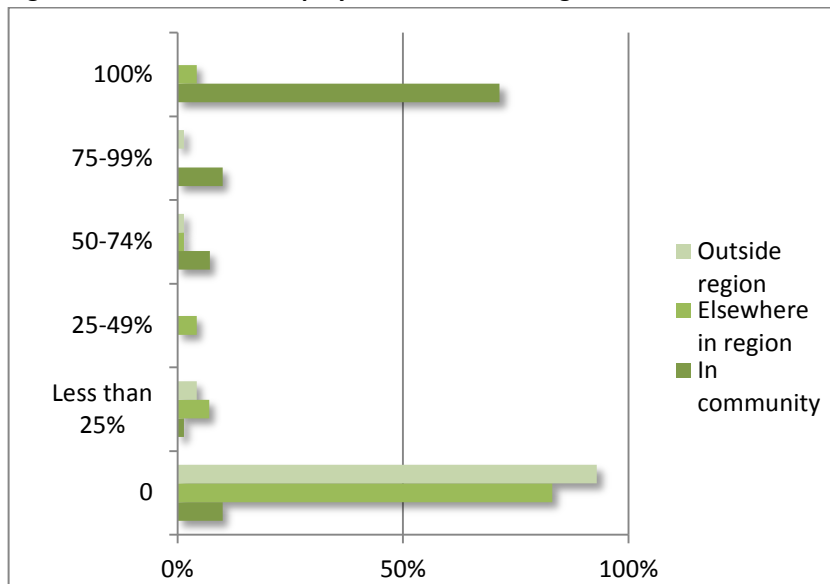
respondents) job security/stability (5 respondents) and quality of the work environment (2 respondents).

**Figure 159: Critical issues to employees - Manufacturing sector**



Seventy-one percent of businesses indicated that 100% of their employees live within the community in which they operate. Ninety-three percent of businesses indicated that 0% of their employees live outside the Columbia Basin Boundary region.

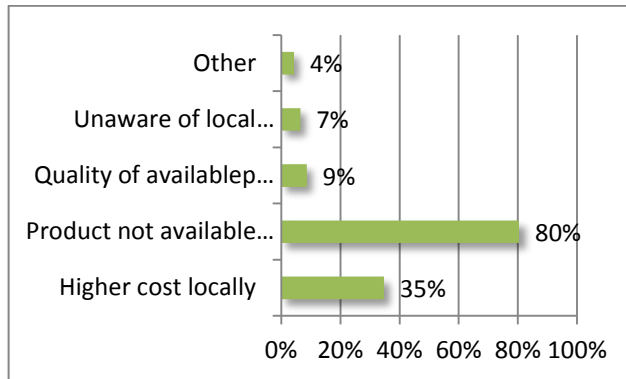
**Figure 160: Location of employees - Manufacturing sector**



### *Purchasing*

Multiple businesses indicated that they are purchasing packaging, food products, minerals/metals or equipment from outside the region. Eighty percent of respondents reported that their reason for purchasing supplies from out-of-area businesses is because the product is not available locally. Thirty-five percent of respondents reported that a higher cost for local products inhibits local purchasing.

**Figure 161: Reason for out-of-area purchasing – Manufacturing sector**

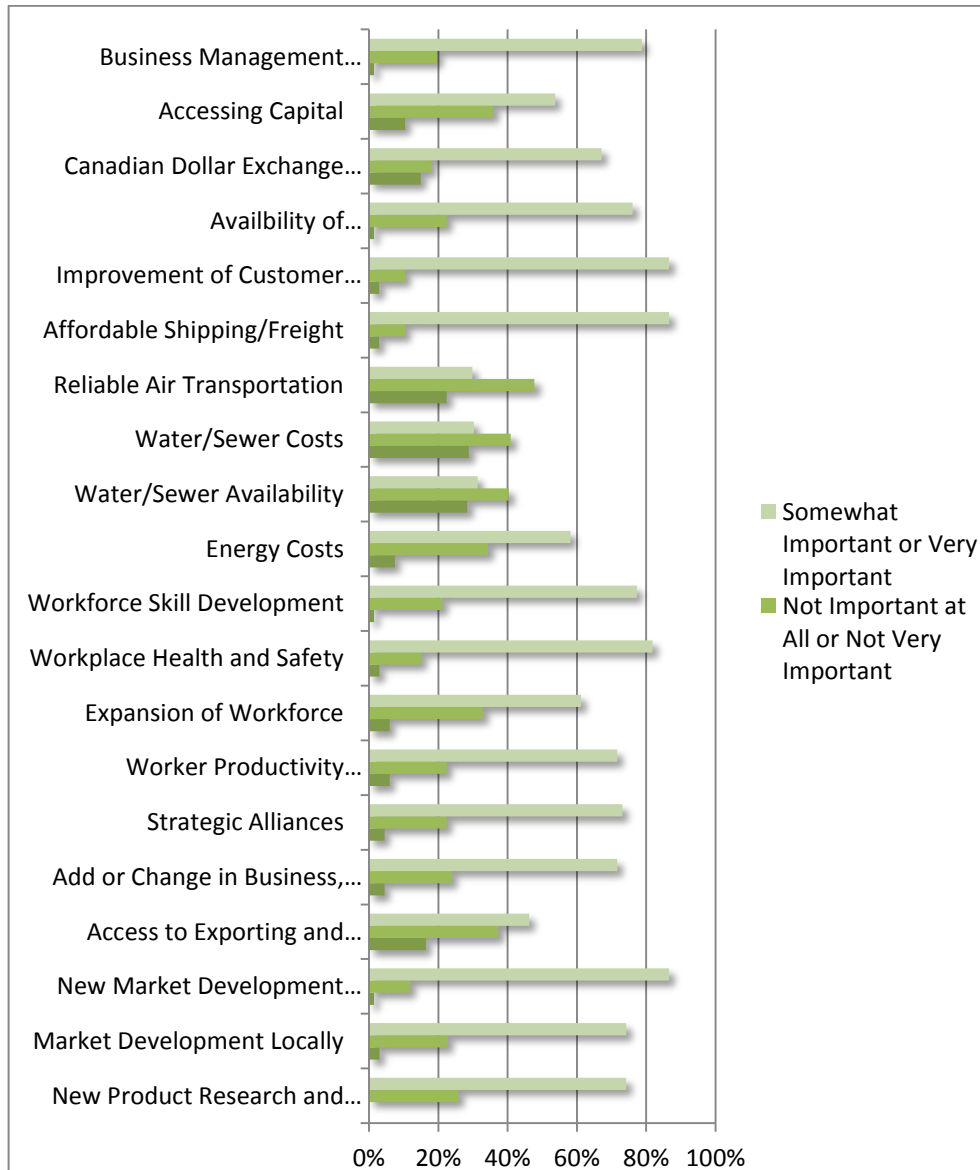


### *Business Competitiveness and Productivity*

Respondents were asked to rate the importance, to their business, of a list of factors that commonly affect the competitiveness of businesses. Factors that received the highest number of 'somewhat important' or 'very important' ratings include development of new markets outside of the region (87%), affordable shipping/freight (87%) and improvement of customer services (87%). Factors that received the highest number of 'not very important' or 'not important at all' ratings include reliable air transportation (48%), water/sewer costs (41%) and water/sewer availability (40%).

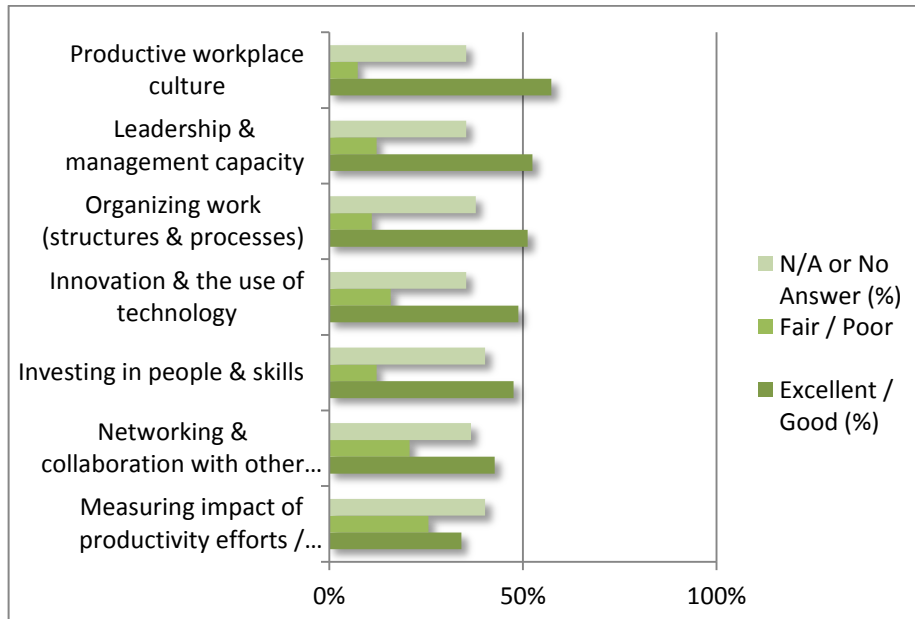


**Figure 162: Business competitiveness factors - Manufacturing sector**



Respondents were asked to rate their company's commitment to a set of important productivity drivers. Drivers that received the highest number of excellent or good ratings include a productive workplace culture (27%) and leadership and management capacity (26%). Drivers that received the highest number of fair or poor ratings include measuring the impact of productivity efforts/investments (26%) and networking and collaboration with other businesses (21%).

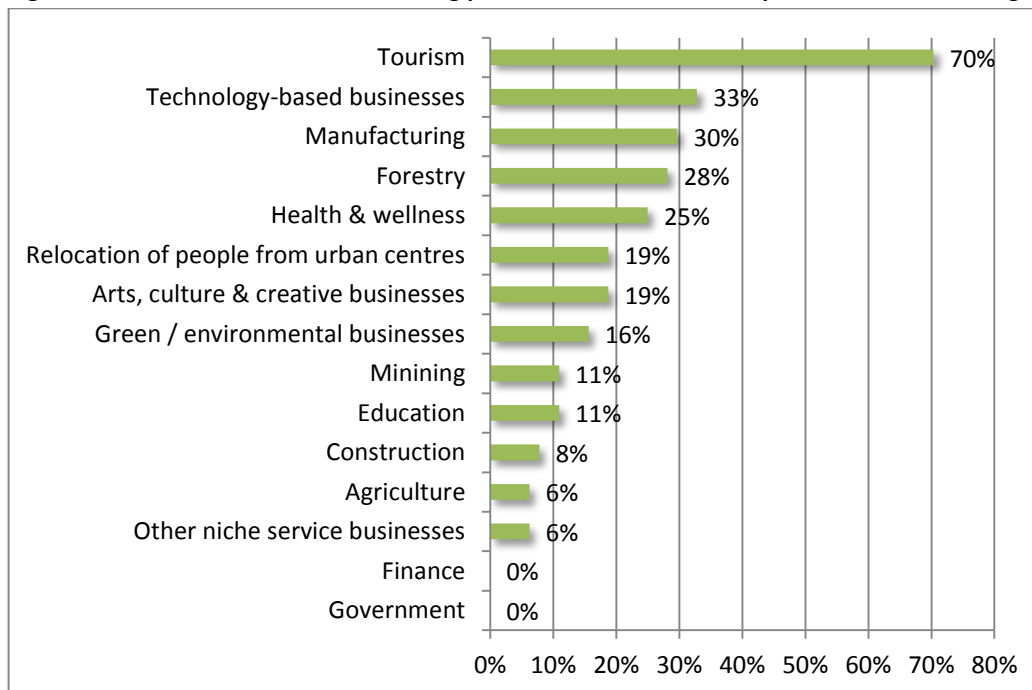
**Figure 163: Commitment to productivity drivers - Manufacturing sector**



### Growth Sectors

Businesses were asked to pick the top three economic sectors that they see as having strong potential for future development in the region over the next 5 to 10 years. The highest number of respondents (70%) chose tourism, followed by technology-based businesses (33%) and manufacturing (30%). Notably, no respondents chose the finance or government sectors as potential growth areas.

**Figure 164: Economic sectors with strong potential for future development - Manufacturing sector**

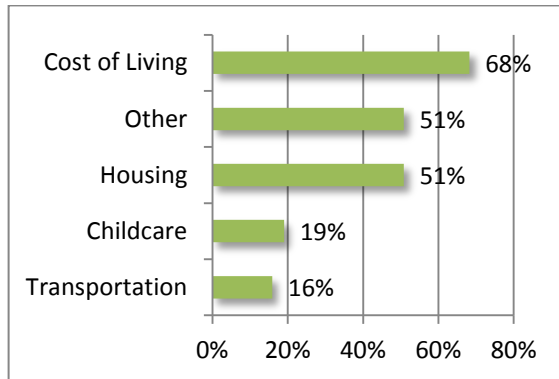


## TECHNOLOGY SECTOR

### Employees

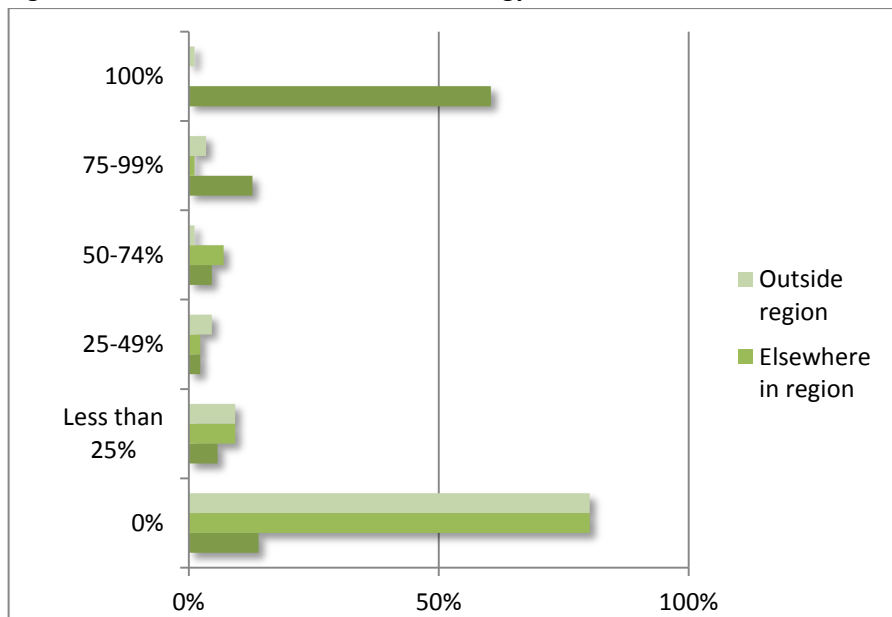
A strong majority of respondents (68%) in the technology sector stated that the cost of living is a critical issue to employees. Fifty-one percent also listed housing as an important factor. Common responses included in the 'other' category illustrated in the graph below include lifestyle (12 respondents), job stability/security (3 respondents), wages (3 respondents) and broadband (2 respondents).

**Figure 165: Critical issues to employees - Technology sector**



Sixty percent of respondents indicated that 100% of their employees live in the same community in which they operate. Eighty percent reported that 0% of their employees live outside the Columbia Basin Boundary region.

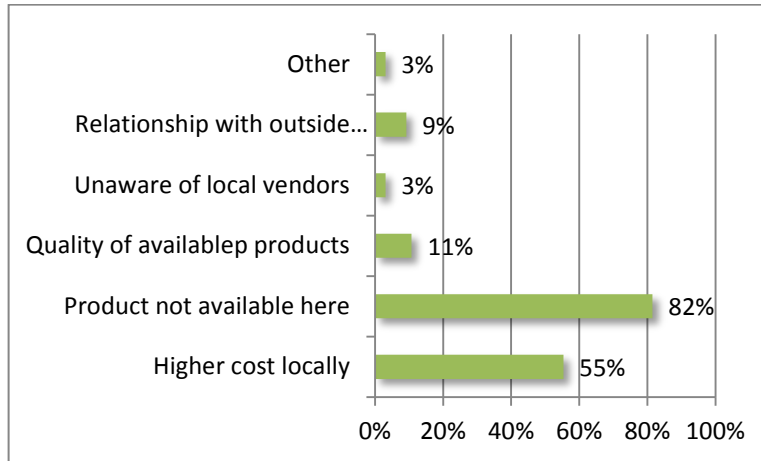
**Figure 166: Location of workforce - Technology sector**



### *Purchasing*

Multiple businesses stated that they purchase computer equipment/electronics (19), office supplies (6), web hosting (4) or IT/fibre equipment (4) from suppliers located outside the region. Eighty-two percent of respondents indicated that they purchase supplies from out-of-area businesses because the product is not available locally. Fifty-five percent also indicated that products tend to cost more from local suppliers.

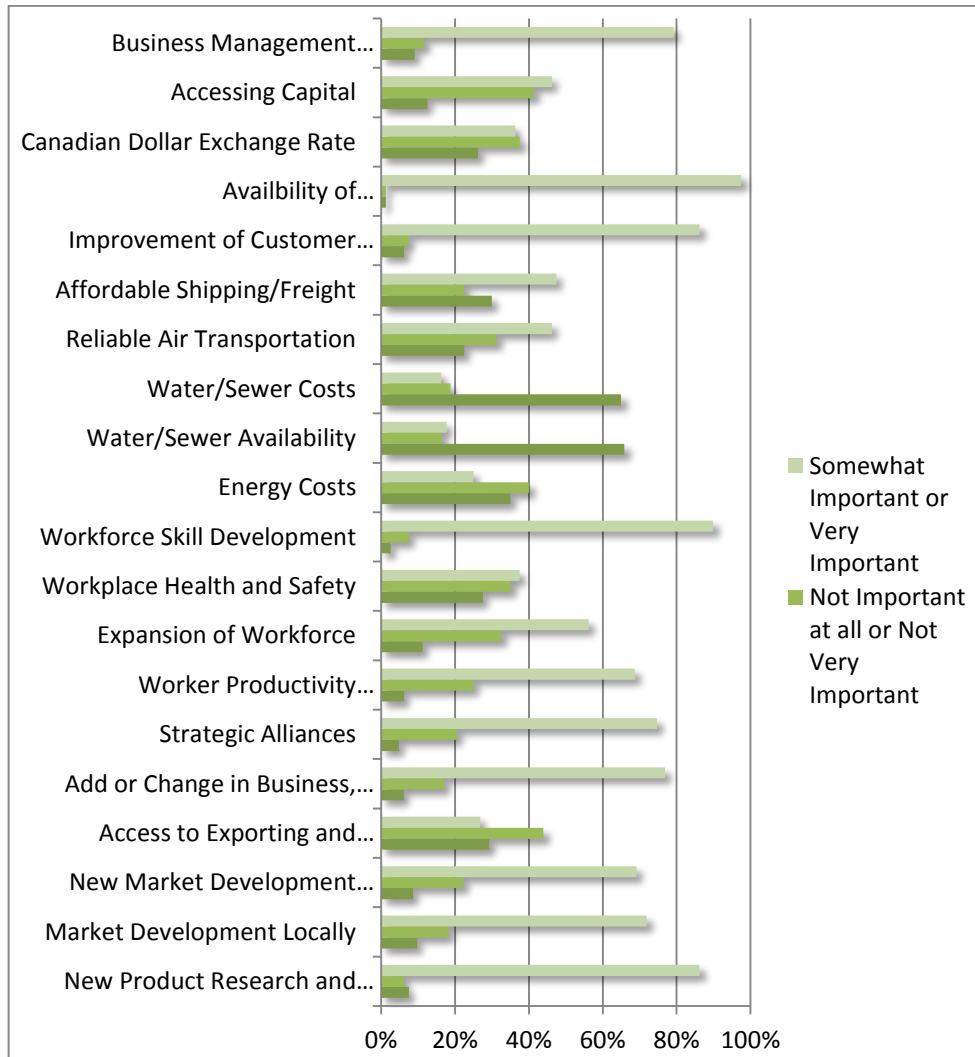
**Figure 167: Reason for out-of-area purchasing - Technology sector**



### *Business Competitiveness and Productivity*

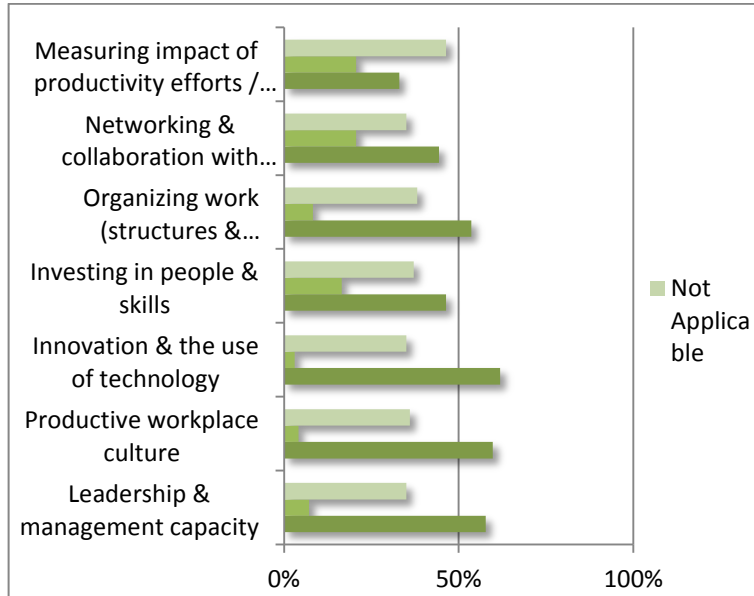
Business competitiveness factors that the highest number of respondents rated as 'somewhat important' or 'very important' include availability of telecommunications infrastructure and services (98%) and workforce skill development (90%). Factors that the highest number of businesses rated as 'not very important' or 'not at all important' include access to importing and international markets (44%) and accessing capital (41%).

**Figure 168: Business competitiveness factors - Technology sector**



Productivity drivers that the highest number of businesses rated their commitment to as excellent or good include innovation and the use of technology (62%) and a productive workplace culture (60%). Factors that had the highest number of fair or poor ratings include measuring impacts of productivity efforts/investments (21%) and networking and collaborating with other businesses (21%).

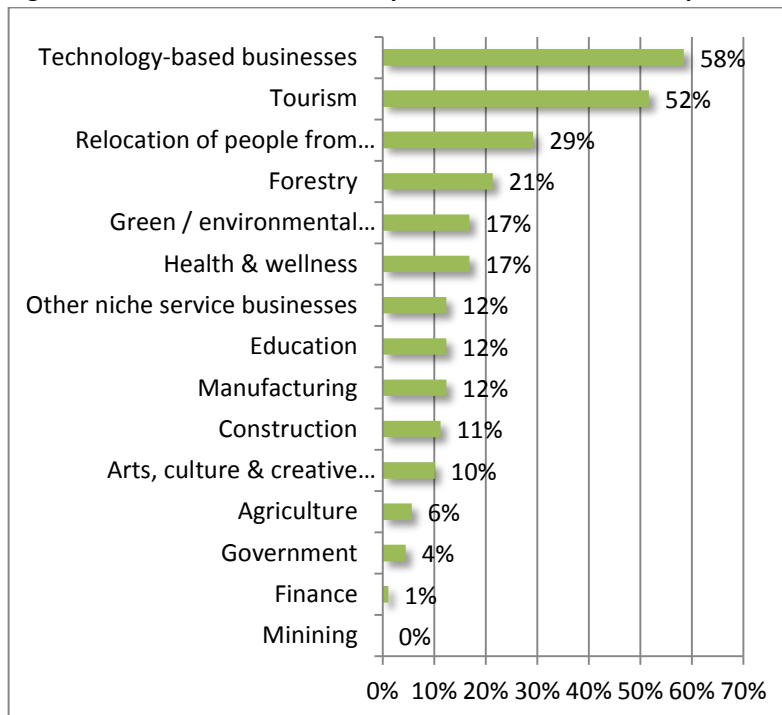
**Figure 169: Commitment to productivity drivers - Technology sector**



### *Growth Sectors*

Fifty-eight percent of respondents identified technology-based businesses as a sector with high potential for future growth. Fifty-two percent identified tourism as an important growth area. Notably, no respondents identified the mining sector as an area with high potential for future growth.

**Figure 170: Economic sectors with potential for future development - Technology sector**



## COMPARISON OF SECTORS

Data indicate that employees in the technology sector tend to live in more geographically disperse areas than do employees in the manufacturing sector. Seventy-one percent of manufacturing businesses reported that all of their employees live within the local community. Only 60% of technology businesses reported the same. Similarly, 93% of manufacturing businesses indicated that none of their employees live outside of the Columbia Basin Boundary region. Only 80% of technology businesses reported the same.

Variation was also noted in the competitiveness factors that respondents in each sector ranked as important to their business. Manufacturing respondents rated development of new markets outside of the region, affordable shipping and freight and improvement of customer services as the most important business competitiveness factors. In the technology sector, respondents indicated that telecommunications infrastructure/services, workforce skill development and new product research and development are the most important business competitiveness factors.

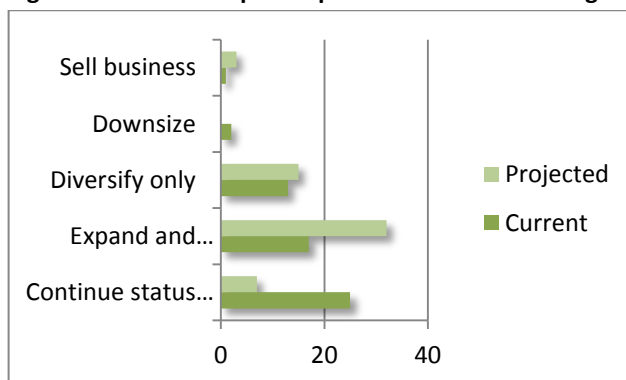
Respondents in both sectors generally agreed on the productivity drivers that they are most and least committed to. Manufacturing and technology businesses both rated their commitment to the 'productive workplace culture' driver as high. Respondents from both sectors also listed the 'measuring impacts of productivity efforts/investments' and 'networking and collaborating with other businesses' drivers as areas for improvement.

## MANUFACTURING SECTOR-SPECIFIC ISSUES

### *Operational Plans*

When asked about the business' plans for plant operation, the highest number of respondents stated that expanding and diversifying is either in their current (17 respondents) or future (32 respondents) plans. Many other businesses reported that maintaining the current size and type of production is either in their current (25 respondents) or future (7 respondents) plans. A planned sale of the business, either in the near term or future, was reported by 1 and 3 businesses, respectively.

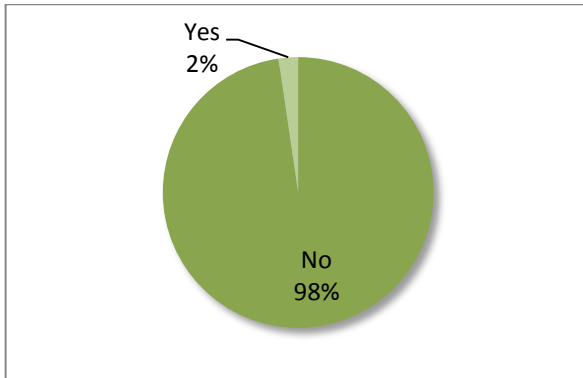
**Figure 171: Plans for plant operation - Manufacturing sector**



### *Sister Plants*

Of the businesses with sister plants operating under the same corporate organization, the vast majority (98%) reported that they do not compete with those plants.

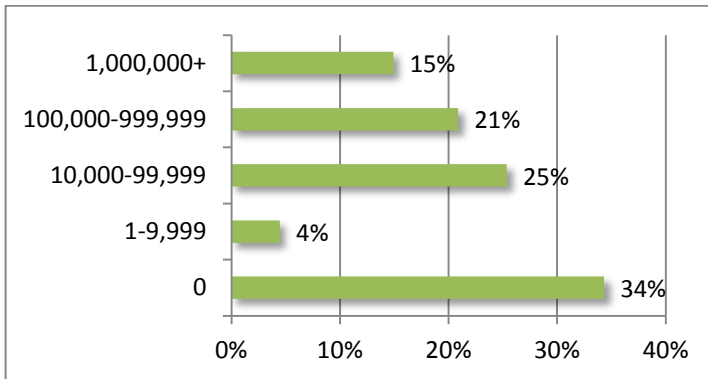
**Figure 172: Competition with sister plants - Manufacturing sector**



### *Purchasing/Outsourcing*

Thirty-four percent of respondents indicated that they do not spend money buying products from other businesses in the average year. Twenty-five percent indicated that they spend between \$10,000 and \$99,999 buying products from other businesses each year. The total amount spent annually by respondents in the manufacturing sector was reported at \$293,926,050; however, it should be noted that 15 manufacturing businesses chose not to answer this question.

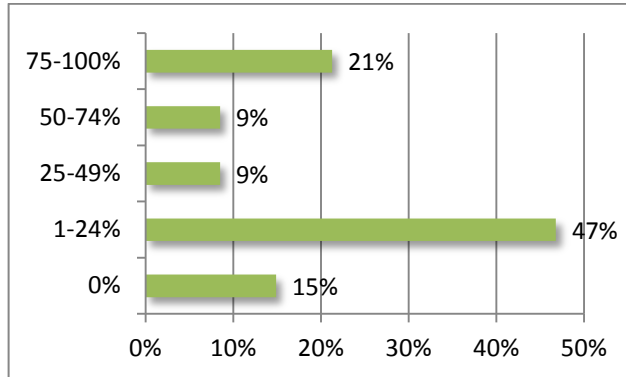
**Figure 173: Annual spend on products and services - Manufacturing sector**



Sixty-two percent of respondents indicated that, of the amount they spend on products and services annually, under a quarter is spent at suppliers within 100 kilometres of their location. Twenty-one percent, however, indicated that 100% of the amount they spend on products and services is spent locally.

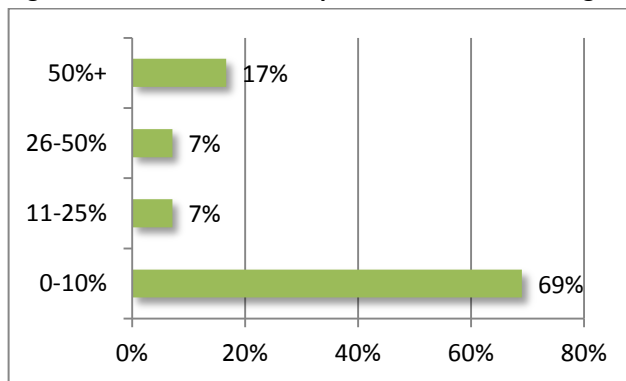


**Figure 174: Local component of annual spend on products and services - Manufacturing sector**



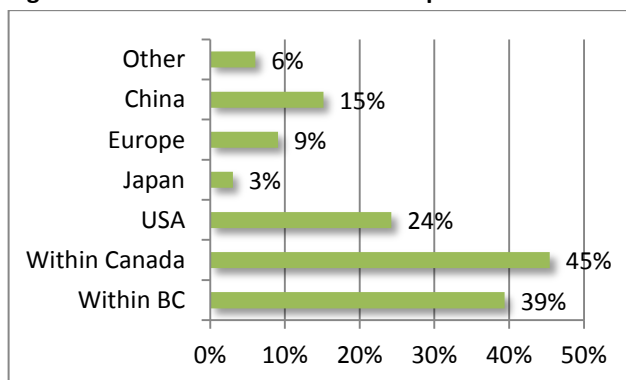
Sixty-nine percent of businesses interviewed indicated that 0-10% of their components are outsourced to another manufacturer. Seventeen percent indicated that half or more of their components are outsourced.

**Figure 175: Outsourced components - Manufacturing sector**



Forty-five percent of the businesses that outsource components indicated that they source components from other provinces, 39% indicated that they source components from BC companies and 24% indicated that they outsource to the US.

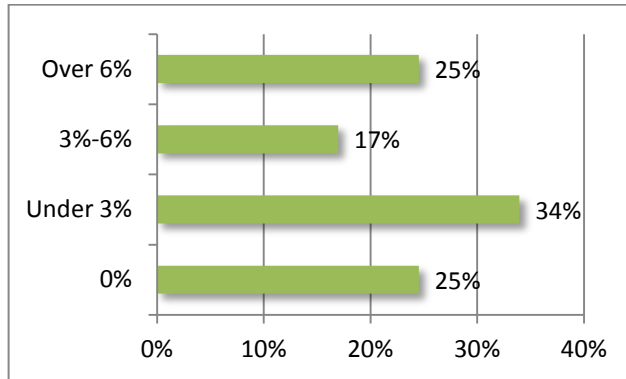
**Figure 176: Source of outsourced components – Manufacturing sector**



### Research and Development

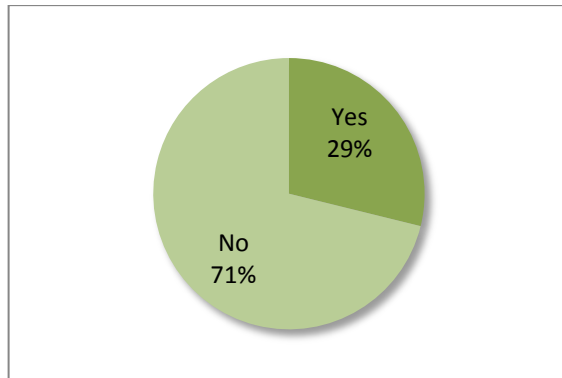
Fifty-nine percent of respondents indicated that they spend less than 3% of their sales on research and development. This figure includes the 25% of businesses that do not spend anything on R&D. Twenty-five percent of respondents spend more than 6% of their sales revenue on R&D. Ninety-eight percent of respondents that engage in R&D reported that they perform R&D at their location as opposed to another location under the same parent company.

**Figure 177: Spend on research and development (% of sales) - Manufacturing sector**



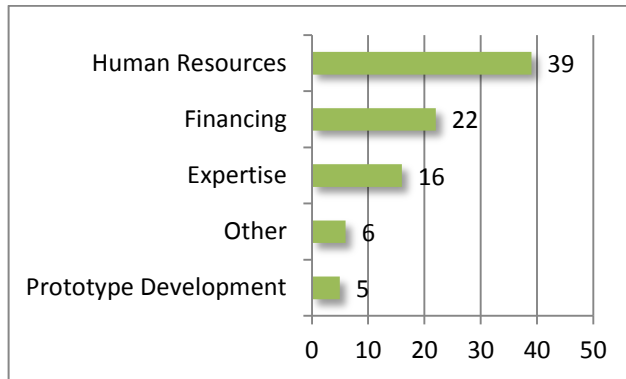
Seventy-one percent of businesses do not expect that there will be an increase to their R&D budget over the next year.

**Figure 178: Anticipated increase to R&D - Manufacturing sector**



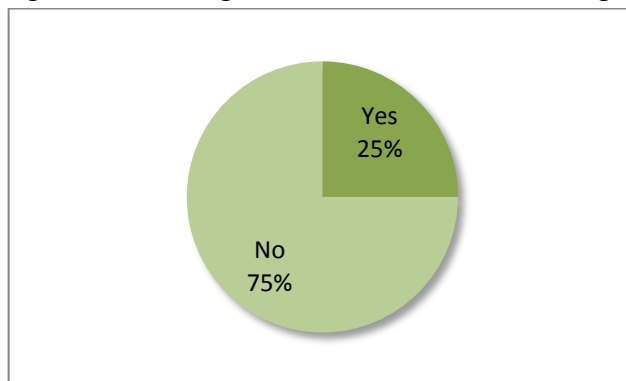
Thirty-nine respondents indicated that issues related to human resources are a barrier to undertaking research and development. Financing was also cited by many respondents (22) as a barrier, as was expertise (16).

**Figure 179: Barriers to undertaking R&D - Manufacturing sector**



Twenty-five percent of businesses indicated that they have or will be claiming a Scientific Research and Experimental Development (SR&ED) tax credit for part or all of expenses incurred to undertake R&D.

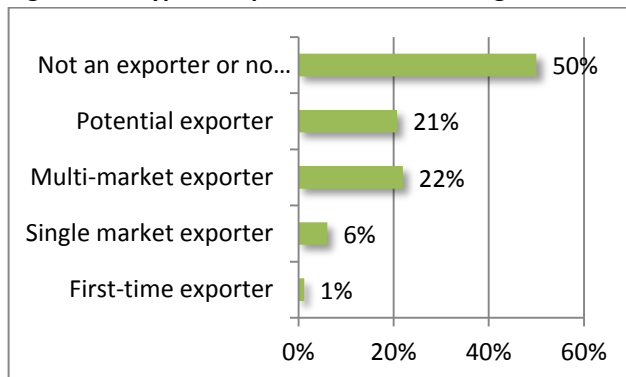
**Figure 180: Claiming SR&ED tax credit - Manufacturing sector**



### *Exporting*

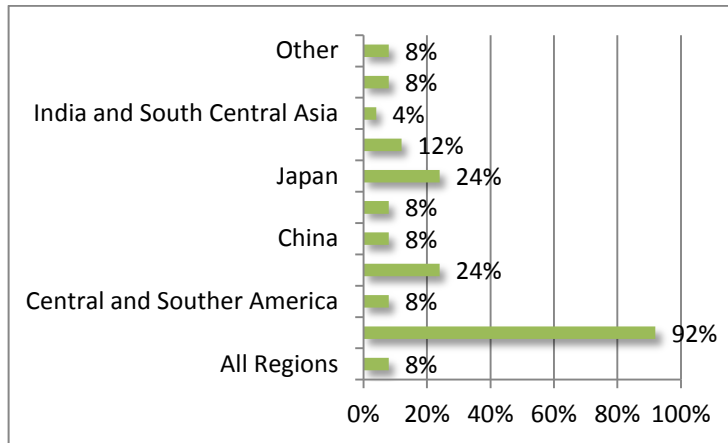
Twenty-two percent of businesses indicated that they export products to multiple markets. Twenty-one percent indicated that they do not currently export, but are considering the option of becoming an exporter.

**Figure 181: Type of exporter - Manufacturing sector**



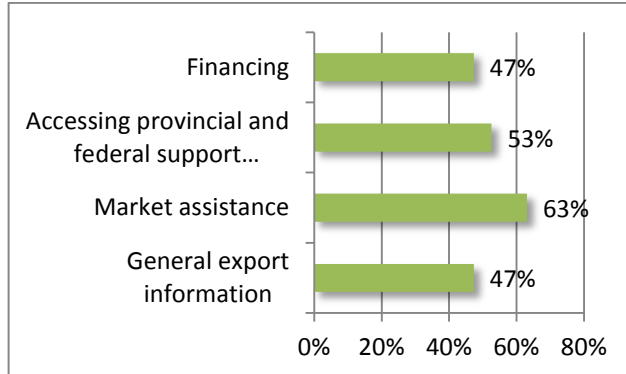
Ninety-two percent of exporters reported that they export to other NAFTA countries (US/Mexico). Other common export locations include Europe (24%) and Japan (24%).

**Figure 182: Export locations - Manufacturing sector**



Thirty-eight percent of businesses indicated that they could benefit from assistance in current export markets or in accessing new markets. Of these respondents, 63% indicated that they require market assistance, 53% indicated that they need assistance in accessing provincial or federal support programs, 47% indicated that they require financial assistance, and 47% indicated that they require assistance in the form of general export information.

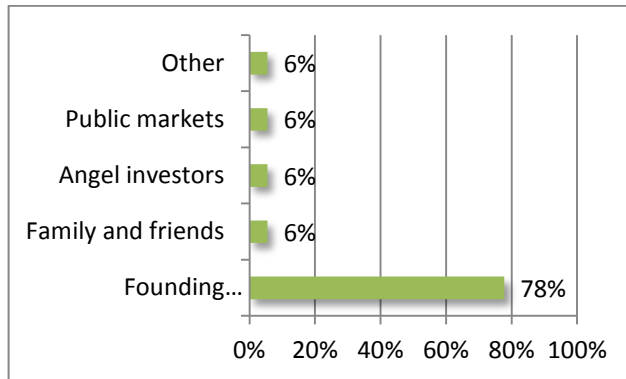
**Figure 183: Types of export assistance required - Manufacturing sector**



### *Investments*

Thirty-six percent of respondents reported that there have been new equity investments in their business over the last three years. Of those respondents, 78% indicated that the source of the new investment was founding shareholders or owners. The remainder of the respondents reported various sources for their investments.

**Figure 184: Source of new investments - Manufacturing sector**



### Barriers to Growth

When asked to reflect on the primary challenges to growth that their business faces, an equal number of respondents (6) listed marketing/sales and government/regulations as barriers. Five respondents also cited each of the following barriers: capital, state of the economy and maintaining quality. An excerpt from one respondent's survey data highlights the importance of marketing to the manufacturing sector:

*"Getting the clients to realize that our product is here. We know it is quality and it sells. It's a marketing challenge."*

**Figure 185: Challenges to growth - Manufacturing sector**



When asked to provide suggestions for actions to improve growth, the highest number of respondents (6) cited the need to promote the region. Multiple respondents also mentioned a desire to see more networking opportunities (4), better shipping/logistics options (3), wage subsidies/grants (3), encouragement of local shopping (3), promotion of wood products (3) and improvements to infrastructure (3). An excerpt from one respondent's survey data provides an interesting perspective on support programs in the region:

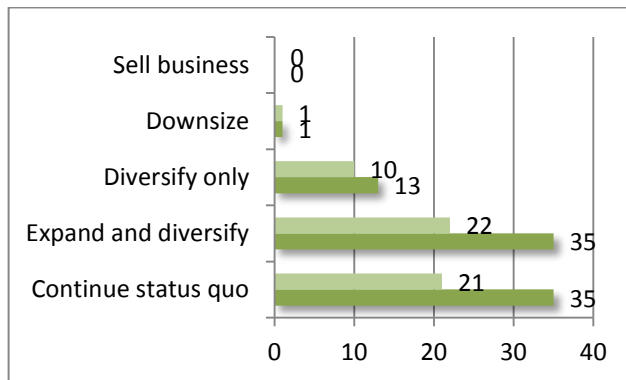
*“More support for successful start-ups. Most programs... provide support for failed businesses or unemployed people. How about some support so existing successful companies can grow further to try new things with a little less risk?”*

## TECHNOLOGY SECTOR-SPECIFIC ISSUES

### Operational Plans

When asked about the business’ plans for plant operation, almost an equal number of respondents indicated that they plan to continue with the current size/type of business or expand the business and diversify the products offered. Expanding and diversifying is in the current and future plans of 22 and 35 businesses, respectively. Continuing the status quo is in the current and future plans of 21 and 35 businesses, respectively.

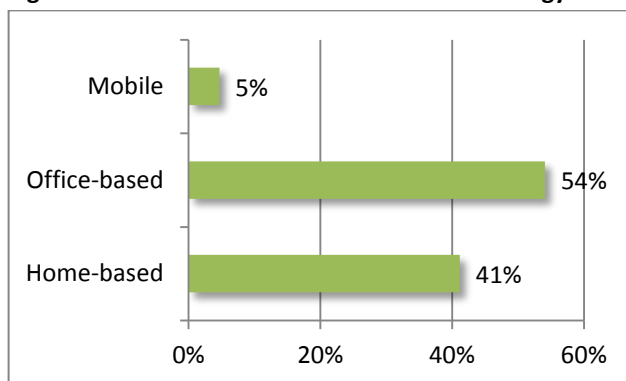
**Figure 186: Plans for plant operation - Technology sector**



### Business Locations

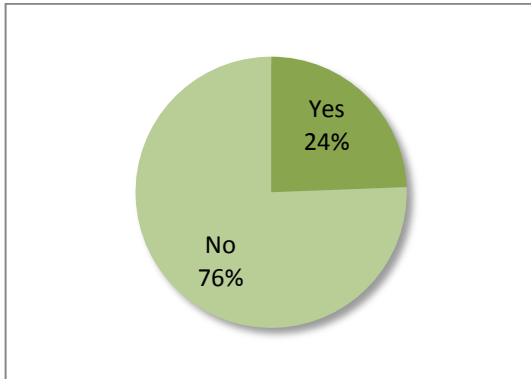
Fifty-four percent of respondents indicated that their business is office-based, 41% indicated that it is home-based and 5% indicated that it is mobile.

**Figure 187: Base location of business – Technology sector**



Twenty-four percent of businesses interviewed indicated that their company has multiple locations. Seventy-six percent reported that their business only has one location. Six percent of respondents at businesses with multiple locations said that their location competes against sister locations.

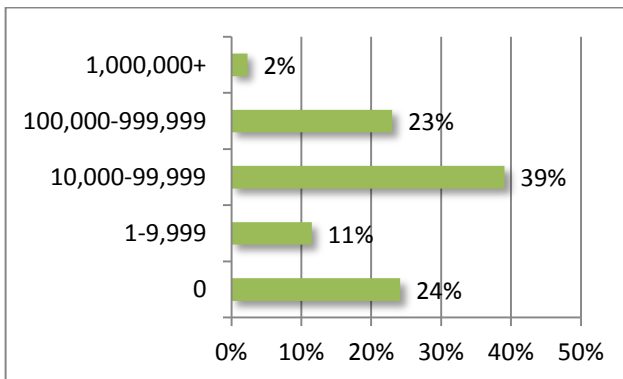
**Figure 188: Multiple locations for business - Technology sector**



#### *Purchasing/Outsourcing*

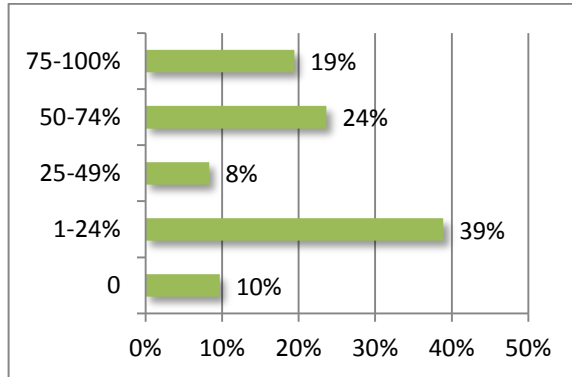
Thirty-nine percent of respondents reported that they spend between \$10,000 and \$99,999 on products and services from other businesses each year. Twenty-four percent of respondents indicated that they do not typically spend any money buying products and services from other businesses. In total, respondents in the technology sector reported spending \$11,403,075 on products and services annually; however, it should be noted that 8 businesses did not answer this survey question.

**Figure 189: Annual spend on products and services - Technology sector**



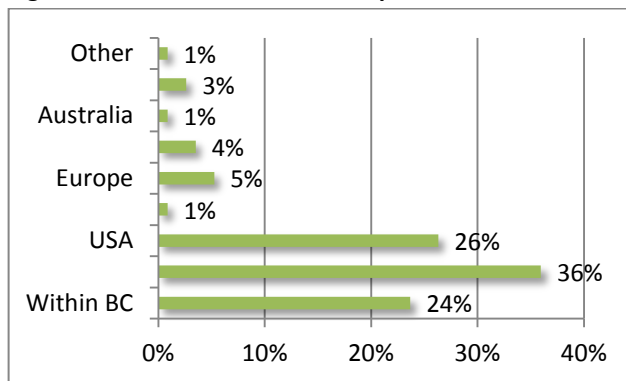
Thirty-nine percent of businesses indicated that, of the money they spend buying products and services each year, 1-24% is spent within 100 kilometres of their location. Twenty-four percent reported that between 50 and 74% of the money they spend on products and services is spent locally.

**Figure 190: Local component of annual spend on products and services - Technology sector**



Of the businesses that outsource products or services to other companies, 36% reported that those products or services originate from suppliers in other provinces, 26% reported that they originate from the US and 24% reported that they originate from BC businesses.

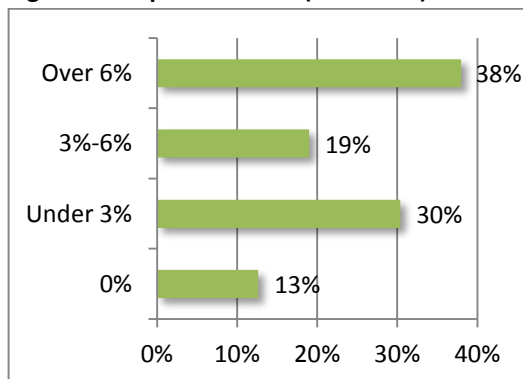
**Figure 191: Source of outsourced products/services - Technology sector**



### *Research and Development*

Thirty-eight percent of respondents indicated that they spend over 6% of sales revenue on research and development. Another 30% indicated that they spend less than 3% on R&D. The vast majority of respondents (94%) reported that R&D activities are centred out of their location as opposed to a head office or sister branch.

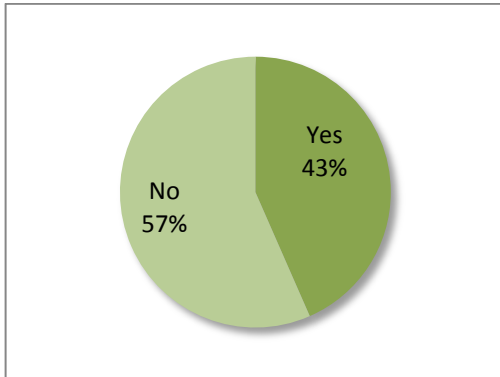
**Figure 192: Spend on R&D (% of sales) - Technology sector**





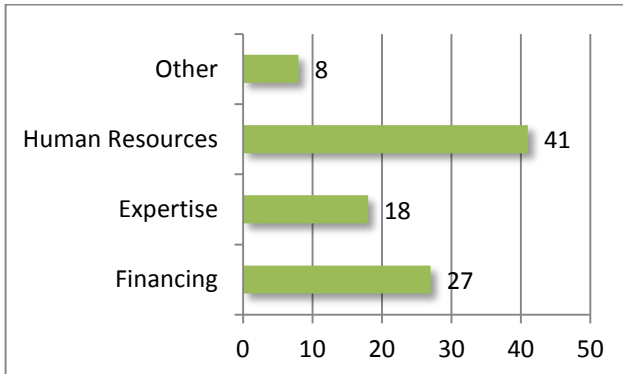
Forty-three percent of businesses interviewed anticipate an increase to their R&D budget over the coming year.

**Figure 193: Anticipated increase to R&D budget - Technology sector**



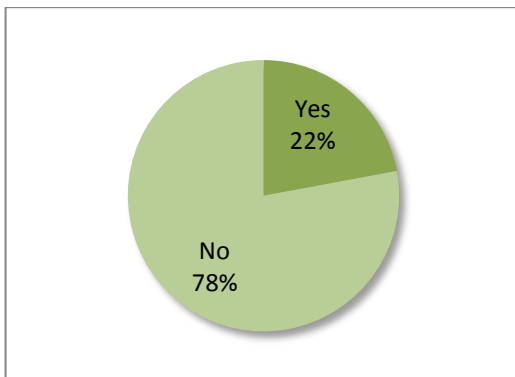
Forty-one businesses indicated that issues related to human resources are a barrier to undertaking research and development, 27 cited financing as a problem and 18 said a lack of expertise prevents their business from undertaking R&D.

**Figure 194: Barriers to undertaking R&D - Technology sector**



Twenty-two percent of businesses plan to claim a Scientific Research and Experimental Development (SR&ED) tax credit for some or all of expenses incurred to undertake research and development.

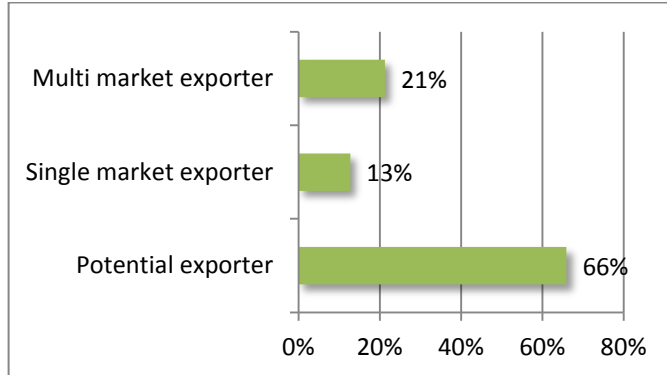
**Figure 195: Plans to claim SR&ED tax credit - Technology sector**



### Exporting

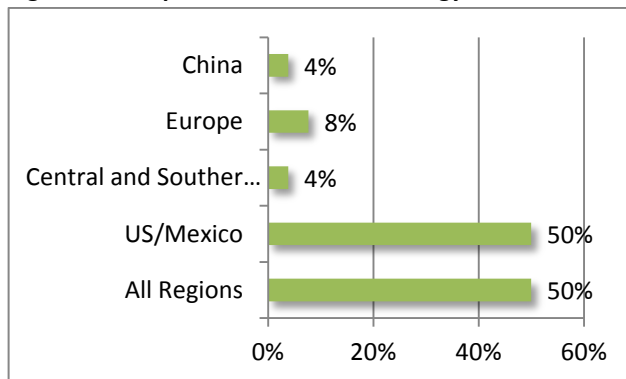
Twenty-one percent of respondents indicated that they export to multiple markets, 13% indicated that they export to only one market and 66% indicated that they do not currently export but are considering becoming an exporter.

**Figure 196: Type of exporter - Technology sector**



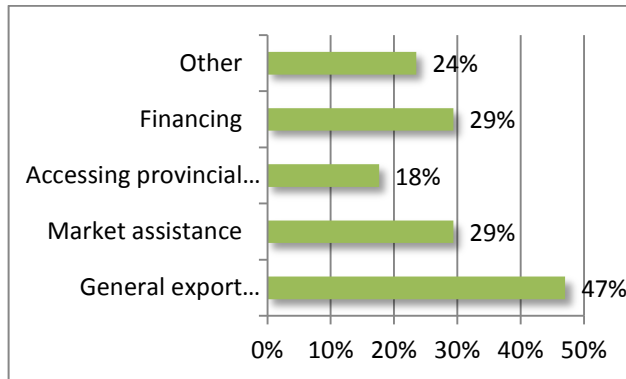
Of the businesses that export, 50% indicated that they export to NAFTA countries (US/Mexico) and 50% indicated that they export to all regions.

**Figure 197: Export locations - Technology sector**



Twenty-three percent of respondents indicated that they could benefit from assistance in current export markets or in accessing new markets. Of those respondents, 47% require general export information, 29% require market assistance and 29% require financial assistance.

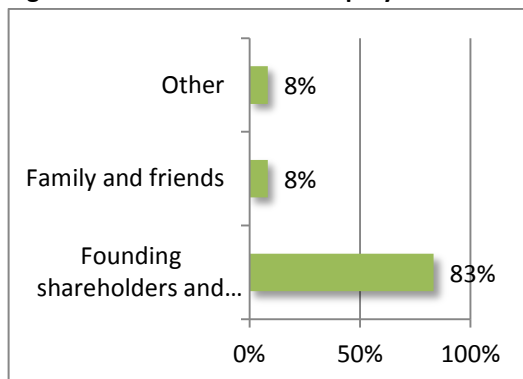
**Figure 198: Types of export assistance required - Technology sector**



### *Investments*

Thirty percent of respondents indicated that their business has seen new equity investments within the last 3 years. Of those businesses, 83% reported that the new investment originated from founding shareholders or owners.

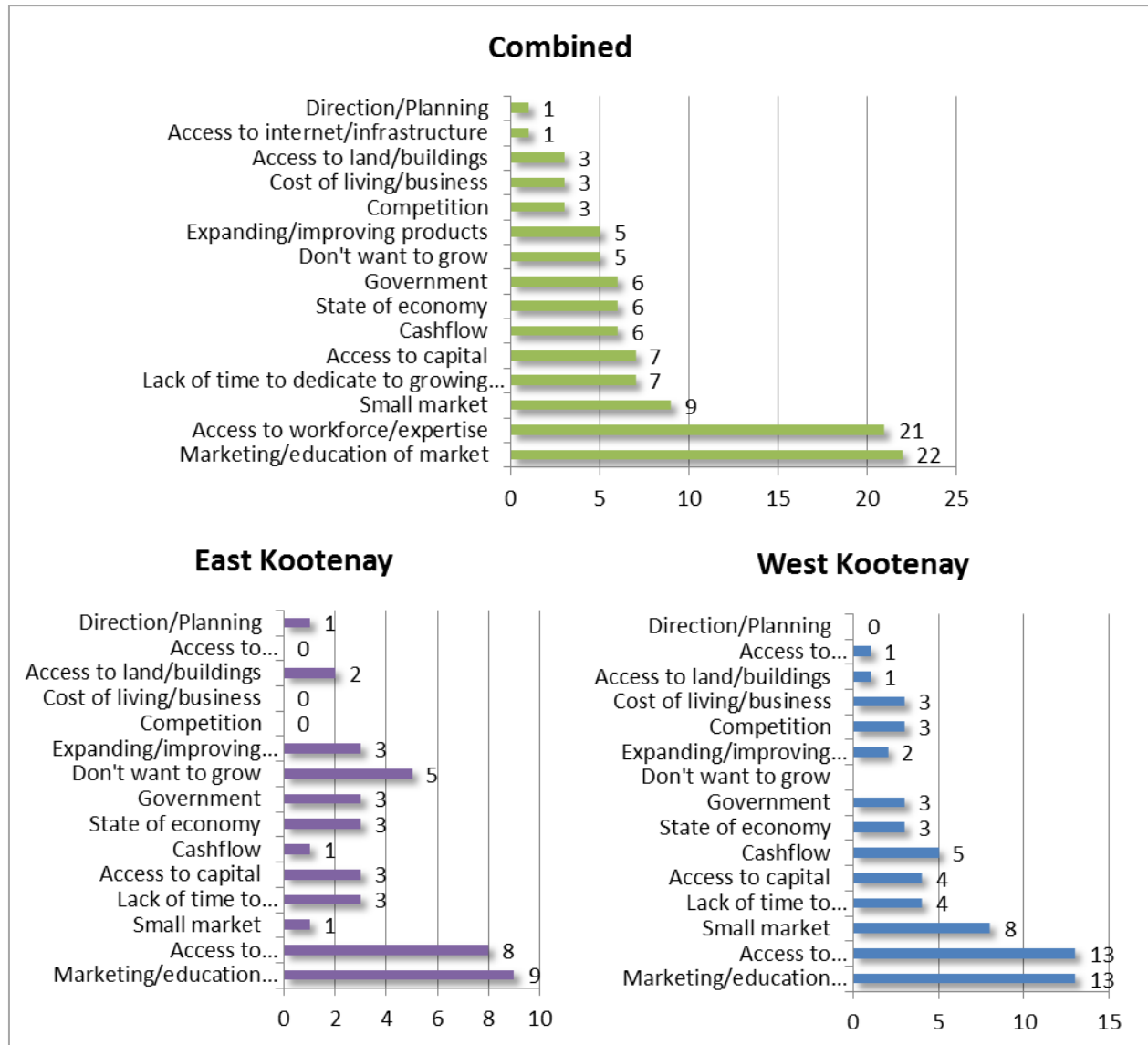
**Figure 199: Source of recent equity investments - Technology sector**



### *Barriers to Growth*

When reflecting on primary challenges to growth, businesses in the East and West Kootenay subregions listed similar factors, but some differences were noted. Businesses from both subregions generally agreed that marketing and access to an appropriately skilled workforce are the first and second most important barriers to growth of their businesses. More East Kootenay respondents than West Kootenay respondents (8 vs. 1) cited the size of the market as a barrier. Five West Kootenay respondents stated that they do not want to grow and would rather maintain their lifestyle. No East Kootenay respondents reported the same.

**Figure 200: Challenges to growth - Technology sector**



When asked to provide suggestions for actions that could be taken to improve growth, East and West Kootenay businesses listed the same top three actions: promote the region (25 respondents), improve telecommunications infrastructure (17 respondents) and provide additional networking/collaboration opportunities (13 respondents). West Kootenay respondents also commonly cited the need to improve transportation infrastructure (7 respondents) and East Kootenay respondents referred to a need to support the local innovation council (4 respondents) and improve local training opportunities (4 respondents). An excerpt from one respondent's survey data links to the regional promotion theme mentioned by many businesses:

*"Hold a big conference or meeting here for the tech crowd. More networking between regions to generate awareness of the area. Share the Kootenays with the rest of the world and what we have to offer here. Actively market the area as a great place to relocate to or work from."*

**Figure 201: Key words in respondents' suggestions for actions to improve growth.**



## KEY THEMES AND NEXT STEPS

Data analysis revealed several key themes that may help to guide Business Retention and Expansion (BRE) follow-up initiatives in the region. This section of the report lists those themes, provides an overview of supporting data, and suggests potential opportunities for collaboration in the delivery of targeted initiatives.

*Note: Data was collected for this report from the Boundary, East and West Kootenay region. Key themes and next step recommendations contained within are specifically targeted at the Columbia Basin Region.*

### SKILLS AND TRAINING

Skills and training represent a significant opportunity for growth within the manufacturing and technology sectors, as well as a potential threat to growth, if not addressed.

Accessing qualified / trained staff has shown to be a common challenge for both the manufacturing and technology sectors. It is a contributing inhibitor to growth for almost two thirds of respondents. This was due to several factors, including a limited local talent pool, lack of local training opportunities and competition from high wages and benefits offered by large industrial players both within and outside the region, making it difficult to attract and retain skilled workers for small to medium sized companies.

Efforts towards attracting additional skilled workers to the region (see Regional Promotion and Recruiting and Retention), as well as improving training opportunities for the existing local workforce, will be important to maintain and expand both the manufacturing and technology sectors.

With 75% of technology respondents and 61% of manufacturing respondents rating technical training in the region as poor, there may be opportunities to both better match the training provided with the skills needed by the sectors, as well as increase access to training offered outside of the region. Broadly, sales and marketing training were common needs in both sectors. This may be the lowest hanging fruit in terms of offering local training, as there is potentially a large enough audience to sustain it.

Additionally, only 25% of respondents were currently, or have previously been involved in government procurement contracts. This may be an area where more information and training opportunities can help a relatively large audience access government contracts.

With respect to specific skills, the technology sector is in need of programmers, and the manufacturing sector in need of specific trades and professional skills. While more specific training provides greater value to companies, it presents challenges with limited audience numbers. It was noted by manufacturers in particular, that they need training on specific equipment. For more specific skill sets, there may be opportunities to host training locally, and draw in an audience from a broader region, and/or host online training that is available to a broader audience, making it sustainable. Additionally, it may prove more efficient, in certain cases, to facilitate access and

travel to training opportunities outside the region. With difficulties in attracting sustainable audiences for more specific training, and significant resources required, an alternate or additional approach would be to facilitate knowledge sharing, connections and collaborations between businesses.

Collaboration and cooperation between business, educational institutions, local governments and economic development agencies will be critical to achieving more efficient, successful, and relevant training in the region, to meet the needs of the sectors, and remove inhibitors to growth.

### **REGIONAL PROMOTION**

While the region has a strong foundation of manufacturing and resource based industries, as well as a strong, if limited in size, talent base in the technology sector, perhaps the largest potential area for growth of both sectors as identified by respondents would be coordinated, collaborative efforts towards marketing and promoting the region.

From both the technology and manufacturing sectors, the lack of a regional marketing effort was seen as one of the most significant weaknesses of the region as a place to do business. It was also seen as far and away the strongest action to promote growth for both sectors.

Marketing the region's available skills, products, resources and supplies, to those within and outside of the area, would be the key focus. Inter-regionally, it was heard, particularly from the technology sector, that there was a general lack of awareness of other businesses, and what they are doing. Boosting awareness of what's available within the region can create the opportunity for additional and more meaningful collaboration, local sourcing of talent, and fostering an enhanced "buy local first" attitude among customers. It was noted by respondents that, by and large, they would prefer to buy supplies locally, but due primarily to a real or perceived lack of availability and/or higher costs, they have had to source outside the region. Internal regional marketing, and increased awareness of what is available locally, may help improve the amount of products and services sourced locally.

At present, while 68% of technology respondents primarily sell to local customers, only 30% primarily buy supplies from local suppliers. Similarly, in the manufacturing sector, 45% of businesses primarily sell to local customers, but only 28% primarily buy their supplies locally. This indicates that money from local customers is exiting the region through supply purchases, and that money is not being recovered back into the economy, as sales are made primarily within the region. Increasing awareness of product and service supplies within the region could improve that ratio towards increased supplies being purchased locally. Boosting external regional marketing to increase out of region sales by local companies could improve the other half of the ratio by lowering the percentage of sales locally. Sourcing more local supplies and selling more products out of market through internal and external regional marketing efforts could help improve that ratio towards one that is increasing the economy rather than decreasing as the numbers indicate at present.

While the Columbia Basin is known as an area rich in natural resources, with a historically strong primary industry presence, it is not necessarily known as a hub for technology-oriented economic activity. It was felt that a cooperative regional approach to developing a regional identity could both increase sales for local businesses, as well as help attract and retain skilled workers.

Many respondents acknowledged that cooperation is important in promoting the region, particularly between municipalities. It was mentioned, in both sectors, that individual communities within the region have undertaken their own marketing efforts, occasionally to the detriment of others. Collaboration between local governments, business, economic development and marketing agencies on a regional message and identity will be critical to developing effective regional promotion.

## **BUSINESS EXPANSION**

Both manufacturing and technology businesses are planning to expand their facilities within the next three years, and are planning to do so within the community they operate. This represents a very large potential for economic growth within the region as 60% of respondents are planning expansions, totalling over \$500 million dollars in potential new investment. Three key barriers were identified as potentially limiting or delaying that expansion, including sales growth (See training and skills), locating and securing appropriate land or buildings, and an anti-growth mindset in the region, particularly around industry and manufacturing.

### *Site Selection*

Although, 70% of businesses noted that their existing sites were adequate for expansion, manufacturing companies listed a lack of land or buildings as their third largest barrier to growth. Specifically, flat and appropriately zoned lands were identified as being difficult to find. Better mapping, inventorying, and communication around available land for manufacturing development have the potential to unlock a large portion of the planned \$500 million dollars in expansion investment. Specifically, there exists an opportunity for collaboration between industry and the Columbia Basin Rural Development Institute's Basin Boundary Employment Lands inventory project.

While not as prevalent an issue with technology businesses, 30% did list their current site as inadequate for expansion. The primary challenge for technology companies is the difficulty in accessing broadband fibre connections (See Telecommunications).

### *Anti-Growth Mindset*

Technology companies cited a lack of desire or willingness to grow and/or change, both by the general population as well as local governments, as the biggest weakness of the region. Manufacturing companies similarly listed it as far and away the number one challenge they face in growing their business. The anti-growth mindset was seen to come from three distinct areas. In some cases the anti-growth mindset stemmed primarily from residents focused on environmental or community protection and a sense of being unwelcome to change. Other instances indicated more so that local governments are acting as a barrier to growth by failing to provide an efficient and time-sensitive



development approval service. Thirdly, although not as prevalent as the first two cases of anti-growth mindset, were businesses themselves that had no desire to grow. The prevalence of these three cases differed depending on location within the study areas.

Whereas manufacturing and industry has a long-standing history in the region, and technology companies are relatively new, the issue is seen from two different vantage points, which offer two different sets of recommendations for change. There is an opportunity for the manufacturing sector to tell the good news stories, as well as the important role it plays in the local economy. For the technology sector, there is an opportunity, through communications focused at government bodies, that investment in broadband / fibre technology is critical for the sector to maintain its current level, and grow into the future. A lack of market education was also identified as a barrier to growth by technology respondents, noting that it could be more challenging to convince the local population and businesses to adopt technology-based solutions (See regional promotion).

### TELECOMMUNICATIONS INFRASTRUCTURE

Reliable, affordable, and high speed fibre-optic broadband is essential to keeping pace with the global economy, particularly when it comes to maintaining and growing the technology sector. For the existing technology and manufacturing businesses to remain competitive, and grow and attract new business and employees, an upgrade in both internet speed and cell phone coverage and reliability, as well as the availability of competitive pricing, will be critical.

A full 98% of technology companies rated improved telecom infrastructure as important to the competitiveness of their business. Manufacturing companies also saw it as necessary, with 76% saying it is important to remaining competitive. Both sectors listed it as the second-most important item that could be done to encourage growth.

Enhancing telecommunications infrastructure will be a key piece in regional promotion, employee recruitment and retention, and business expansion (see previous sections). Without an improved telecomm offering it will be more challenging for technology businesses, in particular, to expand, and makes the region less attractive for businesses to remain, or new businesses to relocate. Conversely, a world-class telecomm infrastructure, paired with the Columbia Basin's competitive advantages of small town lifestyle, big-time outdoor recreation amenities and attractions, lower cost housing (in comparison to much of the Province) and a more human pace of life could create a tremendous opportunity for growth within the region.

The Columbia Basin Broadband Corporation (a subsidiary of Columbia Basin Trust), which is committed to improving broadband in the region, as well as existing telecomm companies, will be an important collaborator on initiatives related to telecommunications infrastructure. A key opportunity could be market education of the benefits of fibre –optic connectivity, as well as training on how existing businesses can utilize it to grow their business.

## SHIPPING AND LOGISTICS

Getting supplies in and products out of the region in a timely and efficient manner is critical to maintaining and growing the manufacturing sector. Due in large part to the nature of the area's geography, the cost and time associated with moving goods in and out of the region has been a long standing challenge. The continual rise of fuel costs has further exacerbated the issue in recent years.

A full 27% of manufacturing companies listed shipping and logistics as the number one weakness to doing business in the region. That has created a limiting effect on growth in the sector. One in ten manufacturing companies saw the issue as both their biggest challenge to growth, and the number one thing that could be done to promote growth in the industry. It was noted several times that shipping costs have doubled in the last five years, rising faster than can be incorporated into their margins.

There are a few shipping cooperatives that have developed around specific niches in the industry, primarily the "Made in the Kootenays," co-op that ships locally produced organic foods. Comments around the concept of a cooperative shipping group came up frequently when discussing solutions. There may be opportunities to promote and help grow the existing small shipping co-operatives that are potentially able to achieve lower costs, and quicker shipping times. There also exist opportunities for companies to partner together on shipments to lower cost. Fostering additional communication and knowledge sharing (see Networking and Collaboration) may help create these connections.

Access information on how to ship, how much, and what options are out here was noted as a challenge by some manufacturers. Creating a source of shipping information that is easily accessed may help some with shipping challenges.

There was a segment of the Manufacturing sector that saw shipping and logistics in this region as an asset rather than a challenge. In particular the region's proximity to the US border and market have been exploited by some. Tapping into the knowledge of those that are utilizing our location to their advantage and sharing with those that could benefit may hold some growth opportunity.

Specific infrastructure upgrades to the transportation system within the region, although resource intensive by nature, regularly came up in discussions around shipping. In particular, lack of ferry capacity in and out of the Nakusp region is a significant barrier to growth in that region. Overall, continued upgrades to highways and maintenance is necessary. Facilitating conversation and information sharing between manufacturing businesses, governments, and economic development agencies may help align the needs of the sector with future transportation planning.

## RESEARCH AND DEVELOPMENT

With research and development (R&D) being one path towards growing and expanding existing businesses, there may be opportunities for growth through assistance or support to increase R&D activity. 25% percent of manufacturing businesses and 13% of technology businesses do not currently undertake R&D as part of their business activities.

The primary reason given for not conducting or increasing R&D activities was by and large a lack of time and the appropriate skill sets to do so. It was noted in conversation that many businesses have the vast majority of their time occupied with day-to-day operations of the business, and lack the time required for future planning, including R&D. The secondary barrier to R&D was finance.

These barriers will be difficult to overcome without support from outside organizations. Well over half of respondent businesses (71% in the manufacturing sector and 57% in the technology sector) do not expect an increase to their R&D budget over the near term. Any potential actions on this theme must therefore account for the limited time and funding resources available from most small- and medium-sized businesses.

Local research institutions, such as Selkirk College and the College of the Rockies, may be able to provide assistance with respect to R&D, especially those that could benefit from the human resource available in a student population. Programs or targeted assistance offered by the National Research Council may also benefit future R&D initiatives.

### EXPORTING AND BUYING LOCAL

Though a large percentage of respondents indicated that they are already successfully selling to international markets, data from many of the smaller or younger businesses suggest that support for export activities may help them grow. 20% of manufacturing businesses and 32% of technology businesses identified themselves as potential exporters. Similar numbers indicated that they could benefit from export assistance, though the type of assistance required varied, depending on the sector. Respondents in the manufacturing sector seemed to be more 'export ready', indicating that they require assistance primarily in identifying and accessing new markets. Respondents in the technology sector seemed to be less export ready, indicating that they require assistance primarily in the form of general export information.

A lack of a strong export and focus on selling outside of the region, focus, especially among technology businesses, may be shrinking the regional economy. While 68% of technology respondents primarily sell to local customers, only 30% primarily buy supplies from local suppliers. Similarly, in the manufacturing sector, 45% of businesses primarily sell to local customers but only 28% primarily buy local. Thus, money from local customers is exiting the region through supply imports and equivalent revenue is not flowing in from outside the region to make up the gap.

Increasing exports ties directly into business expansion (See Business Expansion), and the need to increase local sourcing and out of region sales. It also ties directly into training needs (see Skills and Training).

The most appropriate focus area for future actions may relate to assisting businesses in becoming export ready. The Canadian Trade Commissioner Service can help businesses that are export ready find and access new markets for their products. In order to address the outsourcing of supplies, a shared procurement model may also be a future focus area for exploration.

## **RECRUITMENT AND RETENTION**

In order to retain the businesses we have, and expand the technology and manufacturing sectors, recruiting talented employees and retaining those that are here will be critical.

Many businesses reported challenges both with recruiting and retaining employees; (see Skills and Training and Regional Promotion). However, a larger percentage of respondents indicated that recruitment has been, and will continue to be, a barrier to growth for their business.

Interesting differences were noted between the strategies that respondents reported using to recruit new employees, and the factors that have proven to be successful in retaining employees. This would suggest that actions focused on more closely aligning recruitment efforts with proven retention strategies could benefit the sectors.

There are natural linkages between recruitment and regional promotion efforts. Therefore, collaborations between business, local government, Chambers of Commerce, and economic development agencies will be important for a holistic regional solution. Activities of the Kootenay Regional Workforce Table may also correspond with proposed initiatives for the recruitment theme.

## **ENERGY EFFICIENCY**

Opportunity to increase profitability and drive potential growth in manufacturing and technology may be found through energy efficiency of operations and buildings.

Awareness of, and commitment to, energy efficiency opportunities is relatively low among respondents, especially in the technology sector (though this finding may be linked to the fact that fewer technology businesses own the facility in which they operate). More than half of the companies interviewed are not considering energy efficiency in their expansion plans. Many of those companies were not aware of the BC Hydro Power Smart program, and the resources that that program offers to commercial enterprises.

Support for energy efficiency improvements is already well established through the utilities that operate in the region. Therefore, the most appropriate action items on this theme are sharing the results of the BRE survey with BC Hydro and FortisBC representatives in the East and West Kootenay, and facilitating the dissemination of information on existing programs.

## **BUSINESS NETWORKING AND COLLABORATION**

Increasing business networking and collaboration opportunities in the region has a tremendous potential to foster organic growth within the technology and manufacturing sectors, as well as cross-sector growth. It was noted, particularly among technology respondents, that there was a general lack of awareness of what others in similar or complimentary fields were doing. This has created a silo effect within the sector, in which there are many generalists and jack-of-all-trades technology companies, particularly among the digital media sub-sector.

Creating time and space for potential collaborators to meet, and learn about one another, can increase the likelihood of collaboration. Increased collaboration offers the potential for more specialization, and thus an increased ability to move the sector to higher levels with increased size, scope and complexity of projects that can be handled within the region.

Both manufacturing and technology businesses rated themselves as fair or poor at collaboration, although they listed it as one of their top two productivity drivers. Manufacturing businesses listed networking opportunities second most often as a way to improve economic growth. Technology businesses listed it third most often.

Efforts to facilitate collaboration can also lead to action on many of the key themes discussed above. For example, businesses that are successful exporters could share their experiences with businesses that have not yet entered the export market. Similarly, businesses could access economies of scale by undertaking training or R&D with like-minded companies, or potentially bulk-ordering supplied not available in the region. As previously identified, efforts to boost training, skill development, and R&D can be resource intense, and difficult to attract a large audience to. Actively increasing networking and collaboration has the potential to reduce the need for external programs and support activities, as it has a higher probability of happening organically.

Many entities across the region maintain a shared mandate of facilitating collaboration across businesses. Network-building is a key focus area for the Innovation Councils as well as Community Futures, Chambers of Commerce, and Economic Development Officers. Cooperation between government, business, Chambers of Commerce and economic development agencies will help promote and implement more effective, wider-reaching networking and collaboration efforts.

## CLOSURE

The region's manufacturing and technology sectors have firmly established bases of operation, and offer tremendous opportunity for further growth and expansion. To aid that growth, as was identified in each potential action area, increased, continual and ongoing communication, cooperation and collaboration between business, government, and economic development agencies will support the ongoing growth support of these sectors.

## APPENDIX A: RESEARCH CONSIDERATIONS

### THE BRE PILOT PROJECT

In 2012, two community-based BRE Initiatives took place, including 147 businesses surveyed in Lower Columbia and 58 businesses surveyed in the Boundary. Together with the two sectors surveyed as part of the MATS initiative, these initiatives formed the Columbia Basin Rural Development Institute's (RDI) Regional BRE Pilot Project. KAST and KRIC have entered into data sharing agreements with the two community partners<sup>1</sup> in order to include manufacturing and technology businesses that were surveyed as part of these local projects. Greater Trail, Boundary, and the MATS BRE initiative each used the same standardized survey as provided by the RDI.

The Columbia Basin Rural Development Institute (RDI), at Selkirk College, is supporting communities and the innovation councils in achieving their BRE goals by providing research, training and implementation support. The RDI is a regional centre of excellence in applied research and information provision focused on strengthening rural communities in the Columbia Basin Boundary region. As part of the regional BRE pilot project, the RDI has:

- formed a BRE regional advisory group;
- conducted best practices research on rural BRE implementation;
- piloted one-day BRE Leads and Researchers training workshops;
- supported implementation efforts in two pilot communities and one regional sector-specific initiative (lead by two innovation councils);
- developed additional tools to support community-level BRE implementation (i.e. a manual that provides local BRE Steering Committees and BRE Leads with the information they need to guide BRE efforts in their communities); and
- supported data analysis and reporting activities.

### THE BRE SURVEY

The RDI has a licence agreement with the Economic Development Association of BC for BC Business Counts, a program that provides access to an online BRE survey, contact management, and reporting system called ExecutivePulse. Data presented in this report were collected as part of a comprehensive BRE survey that is aligned with surveys conducted by other participants in the BC Business Counts program. Survey data can therefore be analyzed at a community, sub-regional, regional and provincial level.

The base survey, consisting of 94 questions, includes modules for company information, the local workforce, sales, facilities and equipment, and future plans for growth or succession. Based on

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<sup>1</sup> A data sharing agreement is also in place with the City of Cranbrook which allowed the KAST / KRIC researchers to interview that community's businesses as per the request of the City's Economic Development Officer.

feedback from a BRE regional advisory group, ten region-specific questions were appended to the base BRE survey. A sector-specific 'add-on' survey was also administered to manufacturing and technology businesses. The Manufacturing add-on survey consists of 20 questions and the Technology add-on survey consists of 22 questions. The technology add-on survey was developed within the region by KAST, KRIC, and the RDI. Researchers determined each business' North American Industry Classification System (NAICS) code in advance of the interview to determine which sector-specific add on survey to include. See Appendix B for a copy of the BRE survey.

### **DATA COLLECTION**

A cross-section of businesses were selected for the survey based on size (small, medium, large) and type (according to the North American Industry Classification System). Data were collected by KAST (in the West Kootenay Boundary) and KRIC (East Kootenay) researchers, including and as directed by KAST and KRIC Executive Directors, using structured interviews that lasted approximately one hour and twenty minutes. The process in total lasted approximately four hours per business, including setting up interviews, the interview itself, and data input.

### **DATA INPUT, ANALYSIS AND REPORTING**

Data were entered into the ExecutivePulse system by researchers following interviews. To ensure confidentiality and data security, company-level data were only made accessible to RDI staff and KAST and KRIC Executive Directors and Lead Researchers.

Quantitative data were analysed by RDI using descriptive statistics. Qualitative data were analysed by the KAST researcher using the grounded theory method of generating key coding themes. Based on the results of data analysis activities, recommendations were generated collaboratively by RDI, KRIC and KAST. Findings and related recommendations were assembled into this report by RDI researchers.

## APPENDIX B: THE BRE SURVEY

### BASE LONG-FORM SURVEY



#### COMPANY INFORMATION

Key: ☐ = Select Multiple, ☐ = Select One

1. Description of products/services:  
\_\_\_\_\_  
\_\_\_\_\_
2. Who are your competitors (local, regional, national, international)?  
\_\_\_\_\_  
\_\_\_\_\_
3. What are the factors that make your company successful here?  
\_\_\_\_\_  
\_\_\_\_\_
4. Life cycle stage of firm's primary product/service:  
☐ Emerging ☐ Growing ☐ Maturing ☐ Declining
5. What is this company's ownership status?  
☐ Privately owned ☐ Publicly owned
6. What is this company's legal status?  
☐ Sole proprietorship ☐ Partnership ☐ Corporation ☐ Limited liability partnership (LLP) ☐ Non-profit ☐ Other  
If *Other*, please specify:  
\_\_\_\_\_  
\_\_\_\_\_
7. Location of company's headquarters:  
☐ In Province \_\_\_\_\_  
☐ Elsewhere in nation \_\_\_\_\_  
☐ Outside Canada \_\_\_\_\_
8. How long has this facility operated  
☐ <1 Year ☐ 1-4 Years ☐ 5-9 Years ☐ 10-19 Years ☐ >20 Years
9. Name of parent company, if different:  
\_\_\_\_\_
10. Functions located at this facility:  
☐ Distribution ☐ Engineering/RD ☐ Headquarters ☐ Manufacturing ☐ Services ☐ Warehousing
11. Does this company have another Canadian location that provides a similar product/service as the local operation:  
☐ Yes ☐ No  
Similar Canadian notes:  
\_\_\_\_\_  
\_\_\_\_\_
12. Does this company have another location elsewhere in the world that provides a similar product/service as the local operation:  
☐ Yes ☐ No  
Similar world notes:  
\_\_\_\_\_  
\_\_\_\_\_



13. Has the local facility changed owners in the past 5 years?  
☐ Yes ☐ No
14. If Yes, describe the local impact of the change in ownership:  
☐ Positive ☐ Neutral ☐ Negative
15. Has the local facility changed management in the past 5 years?  
☐ Yes ☐ No
16. If Yes, describe the local impact of the change in management:  
☐ Positive ☐ Neutral ☐ Negative
17. Is an ownership change pending for this facility?  
☐ Yes ☐ No
18. If Yes what is the anticipated time frame:  
☐ 1 year or less ☐ 2 years ☐ 3 years or more
19. If Yes, how do you intend to exit the business?  
☐ Sell/transfer to a family member ☐ Sell/transfer to a non-family member ☐ Sell to another company ☐ Close the business down ☐ Other  
\_\_\_\_\_
20. What is your age group (estimate by interviewer - do not ask)  
☐ Over 65 ☐ 60-65 ☐ 55-59 ☐ 50-54 ☐ 45-49 ☐ 44 and under
21. Have you identified a successor to your business?  
☐ Yes ☐ No
22. Is there a formal succession plan?  
☐ Yes ☐ No ☐ Not applicable
23. If Yes, have you been assisted in preparation of a succession plan?  
☐ Yes ☐ No
24. If Yes, by whom:  
☐ Accountant ☐ Banker ☐ Business partner ☐ Lawyer ☐ Online Internet Resources ☐ Personal financial planner ☐ Spouse ☐ Other  
\_\_\_\_\_
25. Does this firm have a current business plan?  
☐ Yes ☐ No
26. Company information notes:  
\_\_\_\_\_  
\_\_\_\_\_

#### LOCAL WORKFORCE

Key: ☐ = Select Multiple, ☐ = Select One

27. Total number of employees at this facility:  
\_\_\_\_\_ Full-time employees  
\_\_\_\_\_ Part-time employees  
\_\_\_\_\_ Temporary employees  
\_\_\_\_\_ Total employees
28. Estimated total payroll for this location.  
\$ \_\_\_\_\_

29. Historical employment trend:  
☐ Increasing ☐ Staying the same ☐ Declining

30. Projected number of employees at this facility in one year:  
 \_\_\_\_\_

31. Projected number of employees at this facility in three years:  
 \_\_\_\_\_

32. How did the number of staff change, if at all, in the last 3 years?

1 = Increased  
 2 = Stayed the same  
 3 = Decreased

Staff	1	2	3
Full time:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part time:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Casual:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. How do you expect the number of staff to change, if at all over the next 3 years?

1 = Increased  
 2 = Stayed the same  
 3 = Decreased

Staff	1	2	3
Full time:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Part time:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Casual:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34. Is the number of unfilled positions:  
☐ Increasing ☐ Stable ☐ Decreasing

35. Does the company provide a training budget in order to upgrade employee's skills?  
☐ Yes ☐ No

36. Where does the company attract the majority of its workers from?  
☐ Locally ☐ Provincially ☐ Nationally ☐ Internationally

37. Percent of workforce:  
 \_\_\_\_\_ % Skilled/Professional  
 \_\_\_\_\_ % Semi-skilled  
 \_\_\_\_\_ % Entry-level

38. Average hourly wage:  
 \$ \_\_\_\_\_ Skilled/Professional  
 \$ \_\_\_\_\_ Semi-skilled  
 \$ \_\_\_\_\_ Entry-level

39. Describe the wage scale here compared to all other firms locally:  
☐ Greater than ☐ Same as ☐ Lower than

40. Describe the majority of essential personnel at this location:  
☐ Less than 25 ☐ 26 - 34 ☐ 35 - 49 ☐ 50 or older

41. Do you have problems retaining employees?

☐ Yes ☐ No

Employee retention notes:

---

42. Is the company experiencing recruitment problems with any employee positions or skills?

☐ Yes ☐ No

If Yes, in which category(s)?

☐ Administrative/Clerical ☐ Advanced Mfg Workers ☐ Agriculture/Farming ☐ Assembler/Line Workers ☐ CDL Drivers ☐ Construction/Contractors ☐ Electrical/Electronics ☐ Food/Beverage Service ☐ General Laborer ☐ Graphics Arts/Printing ☐ Healthcare Professionals ☐ Hospitality Service ☐ Machine Operators ☐ Machinists ☐ Maintenance ☐ Manufacturing/Other ☐ Marketing ☐ Material/Fabricators ☐ Mechanics ☐ Plant Managers / Operators ☐ Prof/Info Tech/Programming ☐ Professional/Other ☐ Professional/Technical ☐ Sales/Retail ☐ Sales/Service ☐ Other ☐ None

Other (specify job roles/titles):

---

43. Do you anticipate future recruiting difficulties i.e. 3-5 year?

☐ Yes ☐ No

If Yes, in what area(s)?

☐ Administrative/Clerical ☐ Advanced Mfg Workers ☐ Agriculture/Farming ☐ Assembler/Line Workers ☐ CDL Drivers ☐ Construction/Contractors ☐ Electrical/Electronics ☐ Food/Beverage Service ☐ General Laborer ☐ Graphics Arts/Printing ☐ Healthcare Professionals ☐ Hospitality Service ☐ Machine Operators ☐ Machinists ☐ Maintenance ☐ Manufacturing/Other ☐ Marketing ☐ Material/Fabricators ☐ Mechanics ☐ Plant Managers/Operators ☐ Prof/Info Tech/Programming ☐ Professional/Other ☐ Professional/Technical ☐ Sales/Retail ☐ Sales/Service ☐ Other ☐ None

Other (specify job roles/titles):

---

44. Union status:

☐ Yes ☐ No ☐ Not applicable

45. If Yes, what is the status of labor-management relations?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

46. Are there any areas of training or professional development that would be of benefit to you or your employees?

☐ Yes ☐ No

If Yes, what are they?

---

47. When you do attend training/certification, where do you usually access the training?

☐ Local ☐ Regional ☐ British Columbia ☐ Rest of Canada ☐ United States

48. What modes of education/training work best for you?

☐ Classroom ☐ Individual coaching ☐ Online/ Webinar training ☐ Other \_\_\_\_\_

49. Are you aware of any anticipated trends, technologies, significant changes that will be occurring in your industry that will require new skills?

☐ Yes ☐ No

50. Workforce notes:

\_\_\_\_\_

## SALES

Key: ☐ = Select Multiple, ☐ = Select One

51. Annual sales at this facility:

\$ \_\_\_\_\_ ☐ Annual sales private

52. Is the market for your product:

☐ Increasing ☐ Stable ☐ Decreasing

53. Is the market share (compared to your competitors) of your company's products:

☐ Increasing ☐ Stable ☐ Decreasing

54. What is the projected sales growth in the next year at this facility?

☐ Greater than or equal to 100% ☐ 50 - 99% ☐ 25 - 49% ☐ 10 - 24% ☐ 1 - 9% ☐ 0% ☐ Declining

55. Historical sales trend:

Please use the following rating scale:

1 = Increasing; 2 = Staying the same; 3 = Declining; 4 = Not applicable

Historical sales trend

	1	2	3	4
At this facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At the parent company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Within the industry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

56. Sales trend notes:

\_\_\_\_\_

57. Percent of total sales generated by top 3 customers:

☐ 76 - 100% ☐ 51 - 75% ☐ 26 - 50% ☐ 10 - 25% ☐ 1 - 9%

58. Do you engage in government procurement:

☐ Yes ☐ No

59. Please identify the source of your sales by percentage:

\_\_\_\_\_ % Local / Regional

\_\_\_\_\_ % Provincial

\_\_\_\_\_ % National

\_\_\_\_\_ % United States

\_\_\_\_\_ % International

60. Please identify the source of your supplies by percentage:

\_\_\_\_\_ % Local / Regional  
 \_\_\_\_\_ % Provincial  
 \_\_\_\_\_ % National  
 \_\_\_\_\_ % United States  
 \_\_\_\_\_ % International

61. International trade status:

☐ Import ☐ Export ☐ None ☐ Not applicable

62. Historical export sales trend:

☐ Increasing ☐ Staying the same ☐ Declining ☐ Not applicable

63. Sales notes:

\_\_\_\_\_  
 \_\_\_\_\_

#### FACILITY/EQUIPMENT

Key: ☐ = Select Multiple, ☐ = Select One

64. What is the square footage of your current facility?

\_\_\_\_\_ sq/ft

65. Status of facility:

☐ Owned ☐ Leased

If *Leased*, what is the length of term remaining

☐ <1 Year ☐ 1 - 2 Years ☐ 3 - 5 Years ☐ > 5 Years

66. Are you planning on renewing current lease?

☐ Yes ☐ No

If *No*, why not

\_\_\_\_\_  
 \_\_\_\_\_

67. Facility condition:

Please use the following rating scale:

1 = Excellent; 2 = Good; 3 = Fair; 4 = Poor

Facility condition	1	2	3	4
Condition of facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condition of equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

68. Describe the operations at this site:

☐ One shift ☐ Two shifts ☐ 24 hours ☐ Other

If *Other*, please specify:

\_\_\_\_\_  
 \_\_\_\_\_

69. Historical investment trends:

Please use the following rating scale:  
1 = Increasing; 2 = Staying the same; 3 = Declining

Historical investment trends	1	2	3
Over past 18 months in the <u>facility</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over past 18 months in the <u>equipment</u> at this facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

70. Is there room for expansion at this site?

☐ Yes ☐ No ☐ Maybe

71. Are you aware of BC Hydro Power Smart resources that are available to you?

☐ Yes ☐ No

72. Does the company plan to expand in the next three years?

☐ Yes ☐ No

Will it be in this community?

☐ Yes ☐ No

Is your current site adequate for the proposed expansion?

☐ Yes ☐ No

\$ \_\_\_\_\_ Estimated total investment

\_\_\_\_\_ Approximate percentage equipment/technology

\_\_\_\_\_ Approximate percentage real estate

\_\_\_\_\_ Estimated facility size increase (sq/ft)

Estimated timeframe for expansion

☐ < 1 Year ☐ 1-3 Years ☐ > 3 Years

73. What, if any, are the major constraints on your expansion? (Please check all that are applicable)

☐ Broadband access ☐ Energy costs ☐ Energy reliability ☐ Finance ☐ Identifying and accessing new markets ☐  
☐ Lack of skilled staff ☐ Lack of suitable premises ☐ Local regulations e.g. zoning ☐ Problems with DAs ☐  
☐ Roads ☐ Transport/freight ☐ Warehousing ☐ Other (please specify): \_\_\_\_\_

74. Have you approached anybody in local/provincial/federal government or business development organizations to discuss your expansion plans?

☐ Yes ☐ No

75. If Yes, which have you approached?

☐ BC Hydro ☐ BC Ministry responsible for Economic Development ☐ Chamber of Commerce ☐ Community  
☐ Futures ☐ Local Council ☐ Local Economic Development Office ☐ Other (please specify): \_\_\_\_\_

76. Have you factored improvements in energy efficiency in your expansion plans?

☐ Yes ☐ No

77. Facility/Equipment notes:

\_\_\_\_\_  
 \_\_\_\_\_

# GOVERNMENT SERVICES

Key: ☐ = Select One

78. Please rate the following:

Please use the following rating scale:  
1 = Excellent 2 = Good 3 = Average 4 = Fair 5 = Poor 6 = N/A

Services	1	2	3	4	5	6
Access to airport facilities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to highway/roadway:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to markets:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to suppliers:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of road transport services:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of rail transport:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of warehousing:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disposal of waste material:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recycling:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspections (eg: licensing):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development approval process:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Telecommunications (tel, Internet, Cell)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of buildings for lease or purchase	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of appropriately zoned land:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water and sewerage supply:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify):	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

79. Do you have any suggestions on how to improve any of the services and infrastructure listed above?  
☐ Yes ☐ No

If Yes, how?

\_\_\_\_\_

80. Municipal services notes:

\_\_\_\_\_

## BUSINESS CLIMATE

Key: ☐ = Select One

81. Please rate the following:

Use the following rating system:

1 = Excellent

2 = Good

3 = Fair

4 = Poor

5 = No opinion

	1	2	3	4	5
Workforce quality:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workforce availability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workforce stability:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local government:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local tax structure:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Province tax structure:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Workers compensation rates:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Economic development:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultural/Recreational amenities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K - 12 education:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colleges/Universities:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical training:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

82. Notes on business climate rankings:

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83. Please rate the local business climate:

☐ Excellent ☐ Good ☐ Fair ☐ Poor

84. What are the community's strengths as a place to do business?

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85. What are the community's weaknesses as a place to do business?

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86. Are there any barriers to growth in this community?

☐ Yes ☐ No

If Yes, what are they?

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87. Are there suppliers you think could locate in this region?

☐ Yes ☐ No

If Yes, please list:

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88. Are there customers that we should attract to this region?

☐ Yes ☐ No

If Yes, please list:

---



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89. Please compare the local business climate today versus 5 years ago:

☐ Better today ☐ No change ☐ Worse today ☐ No opinion

If worse today, why?

---



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90. Please forecast the condition of the local business climate 5 years from today:

☐ Will be better ☐ No change ☐ Will be worse ☐ No opinion

91. Business climate notes:

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## ASSESSMENT

Key: ☐ = Select One

92. Rate the following:

Please use the following rating scale:  
1 = Excellent; 2 = Good; 3 = Fair; 4 = Poor; 5 = Not applicable

Rate the following	1	2	3	4	5
Facility's overall health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall health of the parent company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local management's attitude toward the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent company's attitude towards the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

93. Rate the risk:

Please use the following rating scale:  
1 = Low; 2 = Moderate; 3 = High

Rate the risk	1	2	3
Facility closing in the next 1 - 3 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facility downsizing in the next 1 - 3 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

94. Are there any local expansion plans in the next 12 - 18 months?

☐ Yes ☐ No

95. Assessment notes:

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## MANUFACTURING SECTOR-SPECIFIC SURVEY



### MANUFACTURING

Key: ☐ = Select Multiple, ☐ = Select One

MF1. What are your A) current and B) projected plans regarding the plant operation? Mark one box in each column

A = Current  
B = Projected in 3 years

Operation Plan

	A	B
Maintain the current size and type of production	<input type="checkbox"/>	<input type="checkbox"/>
Expand the size of plant and diversify products	<input type="checkbox"/>	<input type="checkbox"/>
Maintain current size, but diversify products	<input type="checkbox"/>	<input type="checkbox"/>
Downsize	<input type="checkbox"/>	<input type="checkbox"/>
Exit the industry by transferring the business to a new owner	<input type="checkbox"/>	<input type="checkbox"/>

MF2. Do you compete for business against sister plants within your corporate organization?

☐ Yes ☐ No

MF3. If Yes, are these sister plants(s)...?

☐ Newer ☐ Larger ☐ More efficient ☐ About the same/little difference ☐ In British Columbia ☐ In Canada ☐ Outside of Canada

MF4. Approximately how much does your business spend annually buying products and services from other businesses?

\_\_\_\_\_

MF5. Approximately what percent of this amount is purchased from suppliers located within 100 kilometers of this location?

\_\_\_\_\_ %

MF6. What products do you outsource to manufacturers outside of the service area?

\_\_\_\_\_

MF7. What percentage of your products' components are outsourced from another manufacturer?

☐ 0 - 10% ☐ 11 - 25% ☐ 26 - 50% ☐ 50% +

MF8. From what areas do you primarily outsource products?

☐ Within BC ☐ Within Canada ☐ USA ☐ Japan ☐ Europe ☐ China ☐ Australia ☐ India ☐ Other  
(Specify): \_\_\_\_\_

MF9. As a percent of sales, how much does the company spend on research and development (R&D)?

☐ 0% ☐ Under 3% ☐ 3% - 6% ☐ Over 6%

MF10. Do you conduct R&D at:

☐ This location ☐ Head office ☐ Other branch location ☐ Other (Specify): \_\_\_\_\_

MF11. Do you plan on increasing your investment in Research and Development in the next 12 months?  
☐ Yes ☐ No

MF12. Are any of the following factors barriers to your business undertaking research and development?

R&D Barriers	Yes	No
Financing	<input type="radio"/>	<input type="radio"/>
Proto type development	<input type="radio"/>	<input type="radio"/>
Expertise	<input type="radio"/>	<input type="radio"/>
Human Resources	<input type="radio"/>	<input type="radio"/>
Other (Specify): _____	<input type="radio"/>	<input type="radio"/>

MF13. Have you or will you be claiming an SR&ED tax credit for part of all of these expenses?  
☐ Yes ☐ No

MF14. Is your manufacturing firm a...

☐ Potential exporter (please specify): \_\_\_\_\_  
☐ First time exporter ☐ Single market exporter ☐ Multi-market exporter

MF15. If you export, where do you export to?

☐ All Regions ☐ US/Mexico (NAFTA) ☐ Central and South America ☐ Europe, including Russia ☐ China ☐ Korea ☐ Japan ☐ Other Pacific Rim and Far East ☐ India and South Central Asia ☐ Middle East and North Africa ☐ Other

If *Other*, please specify:

\_\_\_\_\_

If *No*, do you have plans to begin exporting?

☐ Yes ☐ No

If Yes, where?

\_\_\_\_\_

MF16. Do you require any assistance in your export markets or in accessing new markets?

☐ Yes ☐ No

If Yes in what areas:

☐ General Export Information ☐ In Market Assistance ☐ Accessing Provincial and Federal export support programs ☐ Financing ☐ Other

If *Other*, please specify:

\_\_\_\_\_

MF17. Over the past three years, have there been new equity investments in this business?

☐ Yes ☐ No

If Yes, have you received investments from:

☐ Founding shareholders and owners ☐ Family and friends ☐ Angel Investors ☐ Venture Capitalists ☐ Public Markets ☐ Others (Specify)

If *Other*, please specify:

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MF18. Is the business planning to make significant new investments over the next three years?

☐ Yes ☐ No

If Yes, how likely is it that your business will make investment within 100 kilometers of this location?

☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Not applicable

MF19. List the research institutions, federal/provincial agencies, and business service and product suppliers that are key to your success and future competitiveness.

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MF20. Manufacturing Notes:

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## TECHNOLOGY SECTOR-SPECIFIC SURVEY



### TECHNOLOGY

Key: ☐ = Select Multiple, ☐ = Select One

1. What are your A) current and B) projected plans regarding the plant operation? Mark one box in each column

A = Current

B = Projected in 3 years

Technology Plan

	A	B
Maintain the current size and type of business	<input type="checkbox"/>	<input type="checkbox"/>
Expand the size of plant and diversity products	<input type="checkbox"/>	<input type="checkbox"/>
Maintain Current size, but diversify products	<input type="checkbox"/>	<input type="checkbox"/>
Downsize	<input type="checkbox"/>	<input type="checkbox"/>
Exit the industry by transferring the business to a new owner	<input type="checkbox"/>	<input type="checkbox"/>

2. Is your business primarily  
☐ Home based ☐ Office based ☐ Mobile

3. Do you have multiple locations for your business?  
☐ Yes ☐ No

If so, do you compete for business against sister locations within your corporate organization?

☐ Yes ☐ No

If Yes, are your sister locations

☐ Newer ☐ Larger ☐ More efficient ☐ About the same/little difference ☐ In BC ☐ In Canada

4. Approximately how much does your business spend annually on buying products and services from other businesses?

\_\_\_\_\_

5. Approximately, what percent of this amount is purchased from suppliers located within 100 kilometers of this location?

\_\_\_\_\_ %

6. What products or services do you outsource to businesses outside of the service area?

\_\_\_\_\_

7. From what areas do you primarily outsource?

☐ Within BC ☐ Within Canada ☐ USA ☐ Japan ☐ Europe ☐ China ☐ Australia ☐ India ☐ Other  
 (Specify) \_\_\_\_\_

8. As a percentage of sales, how much does the company spend on research and development?  
☐ 0% ☐ Under 3% ☐ 3% to 6% ☐ Over 6%

9. Do you conduct Research and development at:  
☐ This location ☐ Head office ☐ Other location (Specify)

\_\_\_\_\_

10. Do you plan on increasing your investment in Research and Development in the next 12 months?  
☐ Yes ☐ No

11. Are any of the following factors barriers to your business undertaking or increasing research and development?

R&D Barriers	Yes	No
Financing	<input type="radio"/>	<input type="radio"/>
Prototype development	<input type="radio"/>	<input type="radio"/>
Expertise	<input type="radio"/>	<input type="radio"/>
Human Resources	<input type="radio"/>	<input type="radio"/>
Other (Specify): _____	<input type="radio"/>	<input type="radio"/>

12. Approximately how much have you invested in R&D?

\_\_\_\_\_

13. Have you or will you be claiming an SR&ED tax credit for part of all of these expenditures?

☐ Yes ☐ No

14. Is your technology firm a...

☐ Potential exporter (please specify): \_\_\_\_\_  
☐ First time exporter ☐ Single market exporter ☐ Multi-market exporter

15. If you export, where do you export to?

☐ All Regions ☐ US / Mexico (NAFTA) ☐ Central and South America ☐ Europe, including Russia ☐ China ☐ Korea ☐ Japan ☐ Other Pacific Rim and Far East ☐ India and South Central Asia ☐ Middle East and North Africa ☐ Other (Specify)

If *Other*, please specify:

\_\_\_\_\_  
 \_\_\_\_\_

If *No*, do you have plans to begin exporting?

☐ Yes ☐ No

If *Yes*, where?

\_\_\_\_\_  
 \_\_\_\_\_

16. Do you require any assistance in your export markets or in accessing new markets?

☐ Yes ☐ No

If *Yes*, in what areas?

☐ General export information ☐ In market assistance ☐ Accessing provincial and Federal export support programs ☐ Financing ☐ Other (Specify)

\_\_\_\_\_

17. Over the past three years, have there been new equity investments in this business?  
☐ Yes ☐ No

If Yes, have you received investments from:

- ☐ Founding shareholders and owners ☐ Family and friends ☐ Angel Investors ☐ Venture Capitalists ☐ Public Markets ☐ Others (Specify)

\_\_\_\_\_

18. Is the business planning to make significant new investments over the next three years?  
☐ Yes ☐ No

If Yes, how likely is it that your business will make investment within 100 kilometers of this location?

- ☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Not applicable

19. List the research institutions, federal/provincial agencies and business service and product suppliers that are key to your success and future competitiveness

\_\_\_\_\_

20. Technology notes

\_\_\_\_\_

21. If not already covered, what are the primary challenges to growth your business faces?

\_\_\_\_\_

22. What if any actions do you think could be undertaken to promote development of technology related companies in your region?

\_\_\_\_\_