



Lower Columbia Priorities Plan

A stronger Lower Columbia Community
through investment in creative initiatives



Developed fall 2014 by

CENTRE *for*
SUSTAINABILITY
W H I S T L E R

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Introduction

This Lower Columbia Priorities Plan (the Plan) will guide the allocation of \$600,000 in funding for the Lower Columbia over the next two years (2015-16) under the Columbia Basin Trust (CBT) Community Directed Funds (CDF) Program. The CDF Program has provided the six Basin Community Directed Funds with funding to be administered by a local agency and allocated according to local priorities.

For the Lower Columbia, CBT entered into a Contribution Agreement with the Lower Columbia Community Development Team Society (LCCDTS), which established its CDF Committee in October 2013 to administer and operate the Lower Columbia CDF Program. The LCCDTS CDF Committee is now a standing committee of the LCCDTS, first tasked with developing a plan and priorities for the Lower Columbia (Fruitvale, Montrose, Rossland, Trail, Warfield and Areas A and B of the Regional District of Kootenay Boundary), to be used to guide the allocation of multi-year funding from Columbia Basin Trust.

The CDF Committee must support CBT's mandate, which is to *support efforts by the people of the Basin to create a legacy of social, economic and environmental well-being and to achieve greater self-sufficiency for present and future generations*. The CDF Committee terms of reference can be found online at lccdts.com.

In addition to supporting CBT's Mandate, the CDF Committee also established a vision, mission and guiding principles to be used as a compass for its work as a team.

CDF Vision: A stronger Lower Columbia Community through investment in creative initiatives.

CDF Mission: To manage the Community Directed Funds for the benefit of the Lower Columbia Community.

CDF Guiding Principles:

- Consult widely within the Lower Columbia Community but the committee is ultimately responsible for synthesizing that input into a coherent spending plan that will provide ongoing benefits to the citizens.
- Interdependence drives our work together as a committee and with the public.
- Our actions will be transparent, effective and accountable.

An appropriate and transparent community engagement process to inform the development of the Plan was both a CBT requirement and a guiding principle for the CDF Committee. The Whistler Centre for Sustainability was hired to develop the community engagement strategy, and then to design and facilitate the planning and public engagement process on behalf of the CDF Committee. The community

CDF Committee members

Bruce LeRose, Chair

Jim Greene, Rossland

Ray Masleck, Warfield

Ron Parisotto, Trail

Michele Cherot, Montrose

Shelley Verhelst, Fruitvale

Lindsay Partridge, Area A

Bill Edwards, Area B

Members at large:

Betty Anne Marino

Ann Marie Seguin

Nadine Tremblay

engagement process and the input gathered are presented in the next two sections. An overview of the community engagement process and how it led into the Committee's deliberations on the Strategic Priorities to guide the funding is presented below in Figure 1.

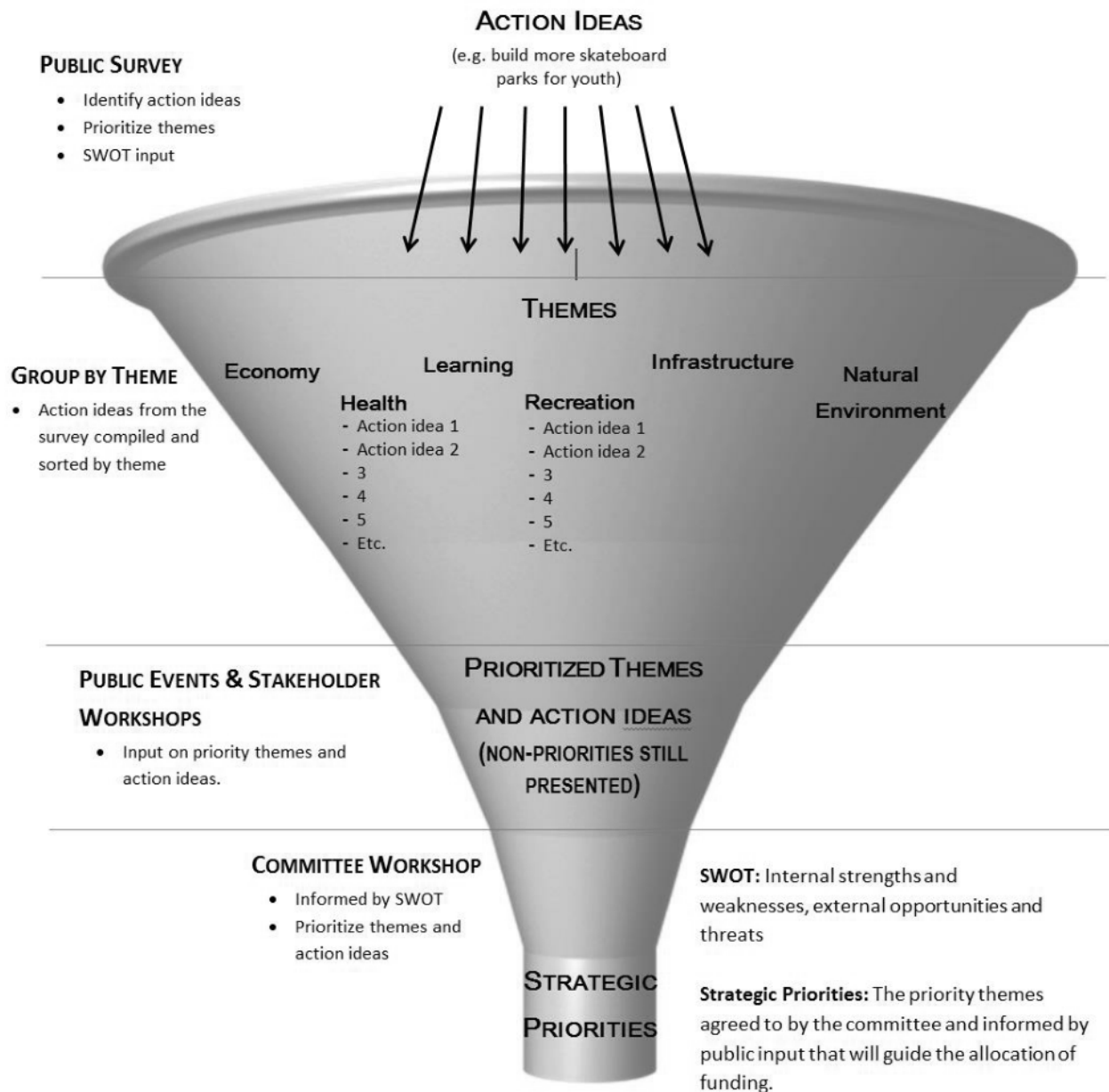


Figure 1: Overview of the community engagement process leading to the development of the Strategic Priorities.

Community Engagement Process

The objectives for the community engagement were to gather input to inform the Strategic Priorities and the development of the SWOT (strengths, weaknesses, opportunities and threats), and to gather action ideas from the public.

Multiple methods of engagement were used to target a range of residents, stakeholder groups and key organizations and to ensure the process was accessible to as many people as possible. The engagement opportunities were communicated through a number of different channels, including: print and online ads in local newspapers; radio; Facebook; email distribution lists; and the newsletters of a number of Lower Columbia organizations. The engagement methods used were:

Online Survey

The 'If I had a half million dollars' survey was used to gather input on priority themes/areas to focus the funding and to gather specific action ideas from community members. A paper survey was also made available in each community. Two \$75 gift certificates to Ferraro Foods were used to encourage Lower Columbia residents to respond.

Public Events

The public events were used to introduce the planning process, present the results from the survey, hear feedback on those results, and gather new input on themes and action ideas. Three events were held on different days and at various times in Rossland, Trail and Fruitvale to provide residents with a number of options and locations to suit their schedules. The events began with a presentation about the Lower



If I had a half
MILLION DOLLARS

If you are a resident of the Lower Columbia (which includes Trail, Rossland, Warfield, Montrose, Fruitvale, Area A and B), please help the LCCDTS Community Directed Funds Committee allocate \$600,000 from the Columbia Basin Trust toward initiatives in the Lower Columbia over the next 3 years.

What would you do with a half million dollars for the Lower Columbia?

**Take the survey. Make a difference.
Win 1 of 2 \$75 prizes for Ferraro Foods!**

ACT SOON! Survey closes September 21st.
Take the survey 3 ways:

1. Visit lccdts.com/prioritiesplan
2. Scan the **QR code**
3. Pick-up a **paper survey** from a Municipal Office or the Chamber of Commerce offices in Trail and Rossland

Learn more: lccdts.com/prioritiesplan
Stay connected: [facebook.com/lccdts](https://www.facebook.com/lccdts)
Questions? info@whistlercentre.ca or 1.604.935.8127

LCCDTS Lower Columbia Community Development Trust Society
Columbia Basin trust

Action Ideas for Economic and tourism development

These Action Ideas were identified through the *If I had a half million dollars* survey. Mark your top 3 that will benefit ALL Lower Columbia residents and provide comments on any.

Check <input checked="" type="checkbox"/> your top 3	Action Ideas	Post comments <i>on sticky notes</i>
<input checked="" type="checkbox"/>	Business attraction, support, retention	<i>highest ranked business attraction</i>
<input type="checkbox"/>	Increase the population	<i>Top 4 are open to combine?</i>
<input type="checkbox"/>	Industrial expansion	
<input type="checkbox"/>	Job creation and training	
<input type="checkbox"/>	Shop local campaign	<i>possible partnership, funding, program, local business</i>
<input type="checkbox"/>	Riverside business development for tourism	
<input type="checkbox"/>	Shopping – more and improved	
<input type="checkbox"/>	Trail downtown buildings and businesses	
<input type="checkbox"/>	Volunteer management	
<input type="checkbox"/>	Market and promote the region as a tourist destination	<i>Market + promotion to link downtown + downtown</i>
<input type="checkbox"/>	Tourism development planning	
<input type="checkbox"/>	Visitor Centre	
<input type="checkbox"/>	Visitor information and signage	

Have an Action Idea to add? Post your big, out-of-the-box Action here that will benefit everyone in the Lower Columbia.*

Columbia Priorities Plan project and the rest of the event was designed to be flexible, enabling people to provide input on posters and speak with CDF Committee members or the project consultant for as much or as little time as their schedules allowed. The action ideas from the survey were presented on the posters around the room (one poster for each of the 13 themes) and participants were asked to comment and vote on them (see image for an example). They were also invited to add new ideas at the bottom of each poster.

Stakeholder Workshops

Three workshops were held – one in each of these communities: Montrose, Trail, and Warfield. They provided an opportunity to ‘dive deeper’ into the survey results, understand the theme rankings better and have the workshop participants identify some top action ideas within each of their top ranked themes. The invited participants were randomly selected from a list of stakeholders compiled by the CDF Committee, LCCDTS staff and the project consultant. The selection process occurred in such a way as to ensure representation from the various sectors (e.g. recreation, tourism, local government, health, etc.).

CDF Committee Workshop

A six-hour CDF Committee workshop was held at the end of the community engagement process. Considering the public input gathered through the engagement process and informed by a high-level SWOT snapshot of the Lower Columbia, the CDF Committee was led through a process to draft and discuss the key components of this Plan, including: the Strategic Priorities (the prioritized themes to focus the funding); specific actions ideas within their prioritized themes; the selection criteria for awarding the funding; and the solicitation/selection methodology.

Community Engagement Results

The input gathered from the community through the engagement process is included in this section in summary or tabulated form. The engagement opportunities were intentionally held in all communities to enable more convenient access by Lower Columbia residents.

Online Survey

A total of 272 people took the 'If I had a half million dollars' survey, representing approximately 1.4% of the population. The figures below present the demographics of the respondents, showing that the majority were from Rossland and Trail, and that most have lived in the Lower Columbia for more than 20 years. While the age breakdown shows very few respondents below the age of 17, the theme and action idea results suggested that the interests of young people were well represented by the older age groups.

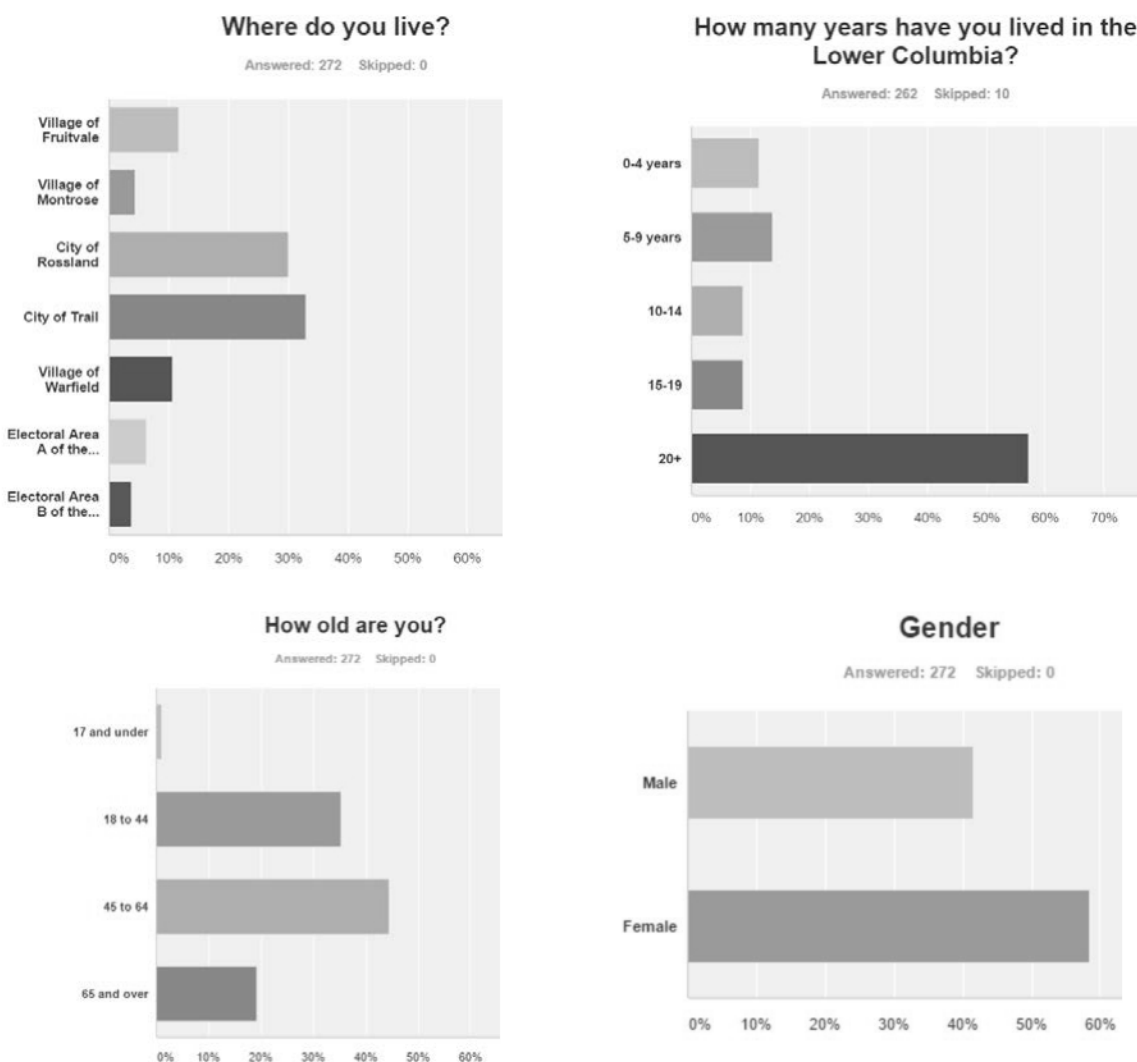


Figure 2: Demographics of survey respondents.

Twelve themes were presented in the survey and respondents were asked to identify where they would focus the \$600,000 in funding, selecting up to three themes in their response. Figure 3 below presents the results for each community and the overall/combined results. Based on the survey results, the themes for the next steps in the engagement process were modified as follows: economic and tourism development were merged into one theme; and two new themes were added (communications and food/agriculture).

	All Combined		City of Rossland		City of Trail		Electoral Area A		Village of Fruitvale		Village of Montrose		Village of Warfield	
	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank	# of people that prioritized it	Resulting rank
Health and emergency services	38	9	6		14		9	2	5		3		1	
Programs/services for children, youth, seniors	60	3	17		21	2	5		10	2	3		7	2
Economic development and employment	75	1	26	1	22	1	10	1	9	3	4	1	6	
Tourism development	56	4	14		20		7		7		1		7	2
Arts, culture and heritage programs and venues	42	7	12		14		8	3	3		0		6	
Recreation programs and facilities	68	2	23	2	22	1	7		6		3		8	1
Education and learning	42	7	20	3	10		2		5		3		3	
Affordability of housing and basic needs	51	5	11		19		5		12	1	3		4	
Transportation services and infrastructure	49	6	12		13		6		12	1	3		7	2
Environmental protection	21	10	11		6		3		2		1		2	
Public spaces - parks, streets, vibrancy	51	5	17		18		8	3	4		1		8	1
Reviewing/changing the governance structures of the Lower Columbia Community	40	8	11		21	2	1		4		1		5	

Note: These were the themes initially provided in the survey. They DO NOT include the new themes added based on the survey results.

Figure 3: Theme rankings from the survey.

Respondents were also asked to identify the top three action ideas they would spend the CBT funding on to benefit the Lower Columbia. Over 600 ideas were submitted and then tallied based on the theme to which they were most closely related (see Figure 4). The 600+ action ideas were then consolidated where similarities existed, resulting in refined lists of action ideas for each of the 13 themes (see Appendix A).

# of action ideas	Theme
112	Recreation
103	Economic & Tourism Development
96	Public spaces Includes parks, streets, downtown areas
70	Transportation and infrastructure
61	Housing and social services
34	Age-friendly initiatives (seniors, children, youth)
23	Governance
23	Education and learning
22	Health and emergency services
20	Environmental initiatives
19	Food, agriculture and food security
17	Communications/technology
11	Arts, culture and heritage

Figure 4: The number of action ideas submitted for each theme.

Public Events

Attendance at each of the events was as follows: Rossland, 25; Trail, 27; and Fruitvale, 5. Comments on the action ideas from the survey were compiled along with the new action ideas generated; both were provided to the Committee for review and consideration before and during their workshop.

Stakeholder Workshops

There were 6-7 participants at each of the workshops (10-12 had been invited to each) and they provided valuable information to the process and for the Committee members observing the sessions. Figure 5 presents the themes prioritized by each group and Appendix B includes the action ideas identified by each group within each top theme. The colour coding in the table shows where common thinking occurred between the groups about the priority themes for the funding.

Trail	Warfield	Montrose
<ul style="list-style-type: none">• Economic + Tourism Development• Governance structures + systems• Programs for children, youth and seniors (age-friendly)• Regional Hospital• Arts, Culture + Heritage	<ul style="list-style-type: none">• Economic development• Governance structures + systems• Transportation• Social Services, Housing + Age-Friendly	<ul style="list-style-type: none">• Governance structures + systems• Transportation Services + Infrastructure• Economic + Tourism Development• Programs for children, youth and seniors (age-friendly) + Social Services• Public Spaces + Recreation• Food, Agriculture + Food Security

Figure 5: The prioritized themes from the three stakeholder workshops.

Strategic Priorities and Action Ideas

The five Strategic Priorities listed below were prioritized by the CDF Committee, taking the public's input and the SWOT snapshot (see Appendix C) into consideration. The five Priorities are very consistent with the top themes prioritized by the public and they will be used by the Committee to provide guidance and focus when soliciting and allocating funding toward initiatives that benefit the Lower Columbia.

Also included in this section are some sample initiatives identified by the Committee and informed by the action ideas submitted by the public through the engagement process. These are included as *ideas* to 'seed' thinking about potential initiatives that might be relevant within each of the Priorities. They do not represent an exclusive list of the things the Committee will consider for funding.

The Committee may also consider other creative initiatives (that meet the selection criteria and that are aligned with this Plan) even if they fall outside of the five Priorities below. These Priorities are useful to guide and focus the Committee's search for creative and beneficial initiatives, but are not meant to exclude other areas and innovative ideas from being considered.

Lastly, key information relevant to the current situation in the Lower Columbia is included to provide some context and rationale for each of the Priorities. Please see the strengths, weaknesses, opportunities and threats (SWOT) snapshot in Appendix C for more detailed information.

I. Economic and Tourism Development

Create a stronger/thriving Lower Columbia economy

This Strategic/Funding Priority was clearly on the minds of the public and Committee members, and there was strong support for this as a focus for the funding. The Lower Columbia's decreasing and aging population, loss of young people and the limited influx of new residents, visitors, businesses and investments to the Lower Columbia were key concerns. On the other hand, the Lower Columbia has a number of key strengths/assets (namely the Kootenay Boundary Regional Hospital and Teck) that are critical to strengthen and leverage to counter some of the challenges mentioned above.

Ideas for potential initiatives:

1. Expand marketing of the Lower Columbia to potential visitors

Specific initiatives could include: a marketing plan for the Lower Columbia; researching successful tourism development initiatives in similar types and sizes of communities; new branding; etc.

2. Attract, retain and support new and existing businesses

Specific initiatives could include: lending/investment programs for local start-ups; a small business attraction strategy; etc.

3. Support KBRH in the Lower Columbia and strengthen its regional status

KBRH is one of the backbones of the Lower Columbia community and economy, helping to attract and retain residents, businesses and professionals. Specific initiatives could include: an advocacy campaign; an advertising/promotion campaign; a study to assess the benefits for the LC; etc.

4. Enhance river access and amenities

Specific initiatives could include: a dock and related amenities; an enhanced RV park; etc.

5. Encourage and enable youth to remain in and return to the Lower Columbia

Specific initiatives could include: a gap analysis of post-secondary training and education needs; create incentives that encourage young people finishing post-secondary programs to return to the Lower Columbia; etc.

The initiatives above are included as *ideas* to ‘seed’ thinking about what might be relevant within each of the Priorities. They *do not* represent an exclusive list of the only initiatives the Committee will consider for funding.

II. Regional Governance

Improve Local Government Efficiencies and Collaboration in the Lower Columbia

The need to find efficiencies and improve collaboration between local government bodies in the Lower Columbia was clearly heard during the community engagement process and Committee discussions. While a number of different ‘solutions’ were identified, ranging from amalgamation to creating a shared vision, it also became clear that there are some initial steps required to learn more about options and bring the public along in the exploration of alternatives.

Ideas for potential initiatives:

1. Develop better cooperation between Lower Columbia communities

Specific initiatives could include: Educating Lower Columbia residents about the benefits of working together; creating a shared vision/plan for the Lower Columbia, such as a Regional Growth Strategy or an Integrated Sustainability Plan.

2. Explore alternative governance models, including amalgamation of the Lower Columbia under one governance model

Specific initiatives could include: a study/assessment of amalgamation options and then communicating the results to residents; a study of the amalgamation of the District of

Crowsnest; creating a local governance body/institute to explore options and build support for an amalgamated/unified local governance model

3. Establish one recreation fee system for the entire Lower Columbia

The initiatives above are included as *ideas* to ‘seed’ thinking about what might be relevant within each of the Priorities. They *do not* represent an exclusive list of the only initiatives the Committee will consider for funding.

III. Support Programs/Services

Support children, youth, seniors and other groups that need assistance to meet their needs and enjoy the quality of life offered in the Lower Columbia

Providing support to those most in need in the Lower Columbia was a recurring theme through the engagement process. Children, families, youth, seniors, and people with disabilities and low-incomes were some of the groups identified as being in need of support of various kinds depending on their needs.

Ideas for potential initiatives:

1. Address children and family needs in the Lower Columbia

Specific initiatives could include: addressing child poverty by developing a child poverty reduction plan; conducting a childcare needs assessment; funding/subsidizing more childcare spaces; etc.

2. Expand/enhance programs needed by youth in the Lower Columbia

Specific initiatives could include: expanding the ‘Sanctuary’ program beyond children to the youth population; conducting a youth needs assessment; etc.

3. Improve transportation services for those in need

Specific initiatives could include: a charter/mini-bus system for seniors, low-income families and people with disabilities; etc.

4. Improve access to services for seniors

A specific initiative could include: a seniors’ resource/information line; a seniors’ coordinator; etc.

5. Expand/enhance programs to address homelessness

The initiatives above are included as *ideas* to ‘seed’ thinking about what might be relevant within each of the Priorities. They *do not* represent an exclusive list of the only initiatives the Committee will consider for funding.

IV. Arts, Culture and Heritage

Enhance arts, culture and heritage (ACH) offerings in the Lower Columbia

Arts, culture and heritage was supported as a priority for funding by the Committee for the benefits it brings to the community and for the contributions it makes to enhancing visitor experiences and thus the local economy.

Ideas for potential initiatives:

1. Increase and enhance events/festivals in the Lower Columbia

Specific initiatives could include: expanding the types of events/festivals; developing a regional plan for coordinating and promoting events/festivals; creating a regional event that happens in all communities; etc.

2. Develop and enhance ACH programs and their accessibility

Specific initiatives could include: developing programs that connect multiple generations; subsidizing programs for people with low-incomes and those with disabilities; creating a permanent/ongoing way for local artists and businesses to work together to achieve mutual benefits; etc.

3. Develop and/or enhance ACH venues/facilities in the Lower Columbia

Specific initiatives could include: improving Charles Bailey Theatre; creating a centre to celebrate the culture and heritage of the Lower Columbia; etc.

The initiatives above are included as *ideas* to ‘seed’ thinking about what might be relevant within each of the Priorities. They *do not* represent an exclusive list of the only initiatives the Committee will consider for funding.

V. Recreation

Enhance recreation opportunities, participation and access in the Lower Columbia

As with arts, culture and heritage, recreation was supported as a priority for funding because of the social and economic benefits it brings.

Ideas for potential initiatives:

- 1. Improve the coordination of and access to the recreation activities offered by each of the communities for all Lower Columbia residents**

Specific initiatives could include: an online system that enable all Lower Columbia residents to access information about and register for recreation programs offered by any of the Lower Columbia communities; etc.

- 2. Expand the trail system for hiking/biking throughout the Lower Columbia and between the communities**

- 3. Promote healthy lifestyles and the four-season recreation opportunities available to Lower Columbia residents**

- 4. Enable more youth to participate in recreation in the Lower Columbia in designated areas**

Specific initiatives could include: Creating all-wheel parks in each community so each community has a designated facility that encourages youth to participate; enhancing existing skateboard parks; etc.

- 5. Improve the connections between the generations through recreation programming**

The initiatives above are included as *ideas* to ‘seed’ thinking about what might be relevant within each of the Priorities. They *do not* represent an exclusive list of the only initiatives the Committee will consider for funding.

Initiative Selection Criteria and Considerations

The selection criteria and considerations will be used to evaluate initiative submissions. All selection *criteria* must be met for the initiative to be eligible for funding. The *considerations* are components that would provide additional benefit to the Lower Columbia; they are therefore included in the evaluation for additional points but are not required.

	Score (1-5)
SELECTION CRITERIA – The initiative must:	
Align with the CBT mandate	
Align with the CDF vision	
Align with the Lower Columbia Priorities Plan	
Benefit the entire Lower Columbia Community	
Achieve long-term benefits	
Be achievable within the timeframe and budget articulated by the proponents	
Project proponents must have the capacity to deliver the project	
CONSIDERATIONS – The initiative will receive additional points if it includes either or both of these elements:	
<ul style="list-style-type: none"> - The initiative includes collaboration between partners and/or communities in the Lower Columbia. - The initiative includes the use and/or development of local capacity/expertise/skills. 	
TOTAL	

Solicitation and Selection Methodology

Initiatives will be sought using a somewhat flexible approach. A request for proposal (RFP) process may be initiated to cast the net for project ideas far and wide. Alternatively, conversations with local stakeholder organizations related to the Strategy Priority may be undertaken to gain a better understanding of project needs and potential delivery agencies. Following the conversations, a RFP may be released or a project/proponent may receive some funding as a direct award once a suitable project proposal/plan has been submitted that meets this Plan's selection criteria.

A list of proposal submission requirements will be developed by the Committee, and will likely include the elements below:

- Information explaining how the initiative meets the selection criteria and considerations
- Clear deliverables or outcomes for the initiative (preferably measurable/quantifiable)
- Plan and timeframe for initiative completion (The required timeframe for completion will be before December 31, 2017, which is the end of the 3 year funding contract for the LCCDTS – the governing body of the CDF Committee.)

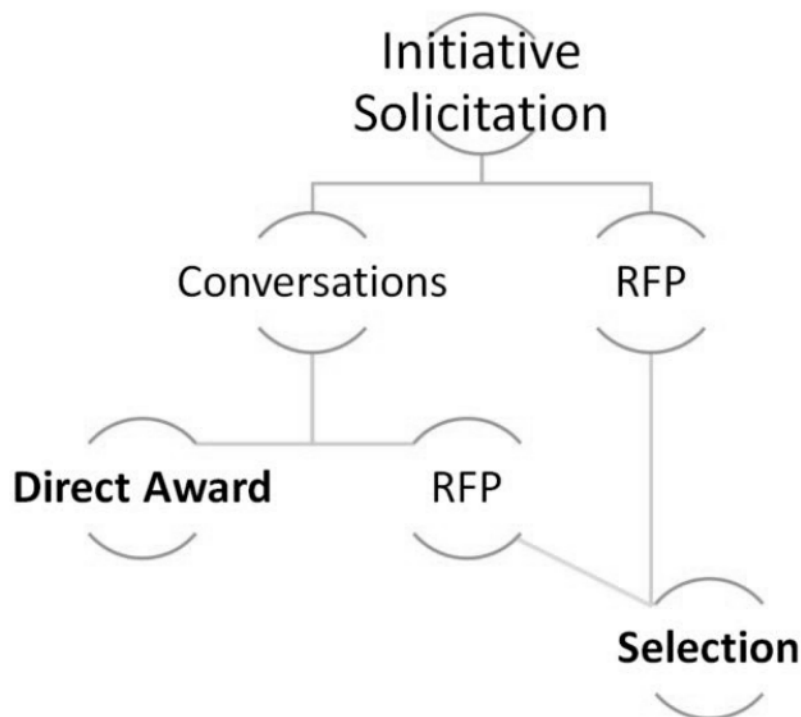


Figure 6: Project solicitation methodology.

Appendix A: Consolidated Action Ideas from the Survey

A total of 272 people took the 'If I had a half million dollars' survey and were asked a number of questions, including the top three action ideas they would spend the CBT funding on to benefit the Lower Columbia. Over 600 ideas were submitted and then consolidated, resulting in the refined list of action ideas below for each of the 13 themes.

Action Ideas for Recreation

- Ball park and batting cages
- Beaver Valley arena roof
- Camp and RV park
- Camp sites at river
- Multi-use recreation facility
- Public swimming pool
- Gyro park enhancements
- Outdoor exercise equipment
- More year round recreation
- Expand walking and biking trails
- Skate board park
- Cross country ski trails
- Ski Club
- Youth recreation

Action Ideas for Public spaces (includes: parks, streets, downtown)

- Beach area improvements
- Beautification and revitalization of downtown Trail
- River access and amenities
- Parks and playgrounds
- Memorial Centre enhancements
- A Violin Lake recreation facility
- Beautification of the river
- New library
- New museum
- Boat launch
- Pet bylaw/pet control
- Community centre
- Develop the Esso lot
- Gondola

- Esplanade Lands
- Gulch building

Action Ideas for Transportation and infrastructure

- Affordable electricity
- Airport improvements
- Bridge beautification
- Bus service for seniors
- Promote electric vehicles
- Repair and maintain infrastructure
- Better public transportation
- Pedestrian footbridge
- Road improvements
- Second vehicle bridge in Trail
- Better walking paths and sidewalks
- Waste management plan
- Public bathrooms downtown
- Taxi service

Action Ideas for Social services and affordable housing

- Affordable housing
- Affordable housing for seniors
- Housing in downtown Trail
- Social services for homeless
- Social services for children, youth, women, families, etc.
- Purchase empty schools for affordable housing or youth/family centres
- Welcome services for new residents

Action Ideas for Economic and tourism development

- Business attraction, support, retention
- Increase the population
- Industrial expansion
- Job creation and training
- Shop local campaign
- Riverside business development for tourism
- Shopping – more and improved
- Trail downtown buildings and businesses
- Volunteer management
- Market and promote the region as a tourist destination
- Tourism development planning

- Visitor Centre
- Visitor information and signage

Action Ideas for Age-friendly initiatives (seniors, children & youth)

- Programs and activities for children
- Childcare spaces
- Early childhood education
- Family-friendly initiatives and spaces
- Financial support for families and children
- Youth programs, activities, space

Action Ideas for Governance structures and systems

- Amalgamation of the communities under one municipal government
- Collaboration between communities
- Increasing public engagement and participation
- Regional recreation services coordination and funding

Action Ideas for Education and Learning

- Equipment for schools
- Art college
- Training for business owners
- Technology and film training facilities
- Job skills training
- Post-secondary programs
- Learning destination to attract visitors
- Alternate education for children
- K-12 school
- “Intelligent community” concept/learning community culture

Action Ideas for Health and emergency services

- Health care access
- Regional hospital improvements
- Mental health and counseling programs
- Search and rescue
- Town sirens in the event of emergencies
- Drug rehabilitation programs
- Hospice / palliative care
- Pre-natal program

Action Ideas for Environmental initiatives

- Bear-smart initiatives
- Fish population enhancement
- Invasive plant management
- Natural areas protection and restoration
- Restore wetlands
- Wildlife conservation

Action Ideas for Food, agriculture and food security

- Community gardens and greenhouses
- Food education
- Composting programs and facilities
- Farmers markets
- Farms and agriculture
- Food security initiatives

Action Ideas for Communications and Technology

- Broadband for everyone
- General communication
- Public Wi-Fi access

Action Ideas for Arts, culture and heritage

- Cultural Centre
- Events
- Arts & cultural programs
- Theatre
- Music therapy

Appendix B: Stakeholder Workshop Action Ideas

In addition to the prioritized themes already presented in the body of the report, below are the action ideas identified by each group for each of their top themes.

Workshop #1: Trail

Top 5 themes	Economic + Tourism Development	Governance structures + systems	Regional Hospital	Age-Friendly	Arts, Culture + Heritage
Action Ideas	<ol style="list-style-type: none"> 1. Identify existing tourism opportunities and create a plan to market and promote them (3 votes) 2. Coordinator for tourism packages 3. Broadband (2 votes) 4. Gap analysis of Lower Columbia post-secondary training and education needs 	<ol style="list-style-type: none"> 5. Amalgamation plan or feasibility study (5 votes) 6. Hire a coordinator/project lead to work with local governments and provincial government on consolidation (1 vote) 6. 	<ol style="list-style-type: none"> 7. Advocate for maintaining KBRH's status as a regional hospital (4 votes) 8. Implement recommendations from the regional hospital study 9. Active recruitment of medical professionals 	<ol style="list-style-type: none"> 10. Support services for families; support Family Action Network for all of the Lower Columbia (4 votes) 11. Seniors support services – extend the Fruitvale program (service examples: transportation to hospital; social activities; housing; coordinator position) (1 vote) 12. Expand/support the Youth Action Network for the Lower Columbia 	<ol style="list-style-type: none"> 13. Support current organizations 14. Funding to bring in and market top acts at local venues (subsidize the event for lower ticket prices) (1 vote) 15. Coordinated Lower Columbia arts, culture and heritage development and celebration (programs, venues, etc.)

Workshop #2: Warfield

Top themes	Econ Development	Governance structures + systems	Social Services, Housing + Age-Friendly	Transportation
Action Ideas	<ol style="list-style-type: none"> 1. Economic development strategy - develop and execute (collaborative process for all Lower Columbia) 2. Community welcome program for all, but with a focus on new medical staff 3. Spousal employment initiative – help to secure employment for the spouses of critical Lower Columbia positions 4. Increase funding to the LCIC to improve Lower Columbia economic development 5. Development of neighbourhood downtown amenities in various hubs across the Lower Columbia – to create gathering spaces of various kinds 6. Columbia River development to improve access to and activities on/near the river 7. Broadband/tech and econ/education connection – develop the broadband infrastructure and educate re use and importance 	<ol style="list-style-type: none"> 8. Amalgamation so all communities pay into and support all existing recreation facilities 9. Develop funding platform, policy and/or procedures where project proponents can share ideas and find synergies for increased efficiency 	<ol style="list-style-type: none"> 10. Capital funding for affordable housing initiatives/facilities (development/renovation) 11. A Lower Columbia Community 'Hub' where residents can access all services in one space (health, FAIR, CCRR, skills centre, etc) 12. Improve age-friendly programs to create connections between generations 	<ol style="list-style-type: none"> 13. Car-share and/or transportation co-op (helps to eliminate expense of owning a vehicle) 14. Establish a youth ridership incentive to increase youth use of public transit 15. Improve transit to better serve the labour force

Workshop #3: Montrose

Top themes	Governance structures + systems	Transportation Services + Infrastructure	Public Spaces + Recreation (2 themes combined by the group)	Economic + Tourism Development	Age-Friendly + Social Services (2 themes combined by the group)	Food, Agriculture + Food Security
Action Ideas	<ol style="list-style-type: none"> 1. Third party assessment of gaps/overlap between local governments 2. Regional OCP or Regional Growth Strategy 3. Convene residents to create urgency about the importance of working together toward a common goal 	<ol style="list-style-type: none"> 4. Explore transportation gaps and solutions for the Lower Columbia 	<ol style="list-style-type: none"> 5. Co-operative recreation infrastructure planning for the Lower Columbia 6. Initiatives to remove financial barriers to participating in recreation (sample solutions: transportation, social services) 	<ol style="list-style-type: none"> 7. Arbitaire (slaughter house to allow meat producers to slaughter and sell locally) 	<ol style="list-style-type: none"> 8. Affordable/ supportive housing for low-income families (include a community garden) 	<ol style="list-style-type: none"> 9. Incubation farm for learning, working and supplying food to low-income residents 10. Aqua-culture on the river

Appendix C: SWOT Snapshot

A strengths, weaknesses, opportunities and threats (SWOT) analysis is a tool used in planning to identify the factors affecting an organization or community.

1. **Strengths:** Existing characteristics/assets that give the community an advantage; things that can be leveraged for future success and sustainability.
2. **Weaknesses:** Characteristics/things that place the community at a disadvantage.
3. **Opportunities (external):** Things we can use for mutual benefit and to help us achieve our goals.
4. **Threats (external):** Things beyond our control that could cause us trouble; make it difficult for us to achieve our goals.

SWOT ANALYSIS



This is a very *high-level* SWOT snapshot compiled – it is *NOT* a comprehensive research piece. It was compiled using the following sources:

1. *If I had a Half Million Dollars* public survey
2. CDF Committee survey
3. Lower Columbia Regional Profile
4. LOWER COLUMBIAIC website
5. Business Retention and Expansion Executive Summary

Strengths	Weaknesses
Place <ul style="list-style-type: none"> • Close geographic proximity of all Lower Columbia Communities • Proximity to U.S.A. and tourism potential • Access to nature: rivers, lakes, scenery, green spaces, gardens • Columbia River • Clean air and water • Four season climate good for year round outdoor adventure: trails for hiking and biking; skiing; fishing; golf; water park • Unique pioneering/mining culture and heritage. • Very close proximity to a rail head accessing one of the largest railway systems in North America. People <ul style="list-style-type: none"> • People are well educated, passionate, 	Place <ul style="list-style-type: none"> • Isolated location, away from major markets/cities • Proximity to U.S.A. and leakage of local wealth; limited shopping in LOWER COLUMBIA • Downtown Trail needs revitalization • Somewhat limited water/river access and activities • During winter often road access is difficult People <ul style="list-style-type: none"> • Minimal population growth (3.3% from 2006 to 2011); in 2011, the Lower Columbia had a total population of 19,223, with Rossland having the highest growth rate of 8.5 % and Trail 6.1% • Aging population (18.6% of Lower Columbia population is over 65 years, which is higher than the provincial average of 14.6%) • Losing young people (Compared to the

<p>involved, committed, creative, skilled, and entrepreneurial.</p> <ul style="list-style-type: none"> • Large skilled volunteer base. <p>Economy</p> <ul style="list-style-type: none"> • Teck and the economic stability it provides to the entire West Kootenays • Kootenay Boundary Regional Hospital – employs approximately 1000 people and helps to attract new residents • Trail Regional Airport • Strong industry sectors and large resource based economy. • The WorkWestKootenay.com website is now live, providing a one-stop resource for information about employment, leisure and lifestyle opportunities in the West Kootenay region. • Invest Kootenay is a regional partnership of Kootenay-region communities who have joined forces to attract, retain, and expand business investment in their community. Invest Kootenay offers a free listing service for investment opportunities and businesses for sale, providing exposure to a database of over 700 registered investors. • The LCIC Business and Retention project has confirmed that businesses in the Lower Columbia Region are planning on investing \$60 Million over a three year period. <p>Housing</p> <ul style="list-style-type: none"> • Fairly affordable housing and low cost of living: the Lower Columbia average assessed home value is 12.5% lower than the provincial average; average sale price of a single detached home in Lower Columbia is \$226,401; 40% lower than the provincial average; • The Lower Columbia Community Development Team's attainable housing committee has secured nearly \$1 million in funding to purchase nine units in Greater Trail distributed among Trail, Fruitvale and probably Rossland. <p>Health & Social Services</p> <ul style="list-style-type: none"> • Fruitvale program for seniors • Good hospital and health care services: 242 physicians per 100,000 residents in the Trail Local Health Area (LHA); which is more than double the provincial average <p>Education and Learning</p>	<p>provincial average, 25% more Lower Columbia couple families have no children at home; Lower Columbia has 16.6% more married couples without children than the provincial average)</p> <ul style="list-style-type: none"> • Some apathy: lack of support, energy, involvement, awareness • Some close-minded thinking, not open to new ideas; stuck in old ways <p>Economy</p> <ul style="list-style-type: none"> • Small population = lack of jobs, education options, business opportunities • Lack of skilled staff cited as a barrier to business expansion and competitiveness • Relatively low diversity in the regional economy • Limited employment opportunities. • Limited commercial space <p>Governance</p> <ul style="list-style-type: none"> • Lack of a strong regional vision • Lack of cooperation and cohesion between communities; animosity and infighting between communities. • Too many governments, need for amalgamation; however, there is also a strong desire by some residents and communities to retain autonomy and <i>not</i> amalgamate • Recreation fee structure • Lack of provincial funding <p>Housing</p> <ul style="list-style-type: none"> • Aging housing stock makes it more difficult to attract people to the area (66% of housing is older than 1970, compared to 30% for BC) • Gaps exist in affordable housing options (there are very few rental homes in the Lower Columbia - 80% of housing is owned); there is a sense that this gap is especially critical for seniors • Of the 20% of housing that is rented, the average rental rate for a 1 bedroom home is \$577, significantly lower than the provincial average of \$828. <p>Transportation & Infrastructure</p> <ul style="list-style-type: none"> • Unreliability of Trail Regional Airport and the limitations of the terminal building • Bad road conditions • Poor public transportation • Lack broadband connectivity (except downtown Trail, which will be first recipient) <p>Health & Social Services</p> <ul style="list-style-type: none"> • Limited youth programs and facilities.
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<ul style="list-style-type: none"> • Good schools • Three municipal libraries • Close proximity to Selkirk College programs at Trail, Castlegar and Nelson campuses. 	<ul style="list-style-type: none"> • Some homelessness and poverty <p>Education and Learning</p> <ul style="list-style-type: none"> • Limited post-secondary education options • Limited programs at the Trail campus of Selkirk College
Opportunities	Threats
<ul style="list-style-type: none"> • Cultural tourism (including mining): Aboriginal cultural tourism and learning/experiential travel are among the fastest growing tourism sectors • Recreation and eco-tourism: growing tourism sectors • KBRH investments • Existing momentum for these initiatives: <ul style="list-style-type: none"> ○ Broadband ○ Amalgamation ○ Skateparks ○ Markets ○ Arts programming • Columbia Basin Trust – potential increase in funding and review of strategic priorities underway through the “Our Trust Our Way” campaign 	<p>Economy</p> <ul style="list-style-type: none"> • Canadian dollar: Rises can challenge exports and tourism • Global economic downturns • Global metal prices and impact on Teck, which could lead to downsizing and loss of jobs • Rising cost of food • Potential for KBRH to lose regional status <p>Competition from other communities</p> <ul style="list-style-type: none"> • Limits access to government funding • Makes it more difficult to attract new businesses and residents <p>Natural Threats</p> <ul style="list-style-type: none"> • Climate change and associated extreme weather events: affect food sources, fish runs, travel intentions, etc. • Fire, flood, earthquake. <p>Demographic Trends</p> <ul style="list-style-type: none"> • Urbanization is a global trend and is drawing many young people away from small towns to larger cities
<p>Demographic Trend: Many aging “Boomer” homeowners in larger urban centres, regard their homes as their principal ticket to retirement. The leading edge of this large cohort of people is now hitting 65. Many are looking to cash out their principal residences, downsize and/or get out of town into smaller, affordable towns and cities. (Source: Regional Profile)</p>	
<ul style="list-style-type: none"> • The opportunities presented by the potential ‘Boomer’ influx include the increased wealth, knowledge and volunteer capacity imported to the region. It could also help to secure KBRH as the regional hospital. 	<ul style="list-style-type: none"> • This is a potential threat to the Lower Columbia for the following reasons: it may cause housing prices to increase which would reduce the affordability and availability of low-cost housing for younger people (families, entrepreneurs, etc.); it will increase the seniors segment of the Lower Columbia population which doesn’t assist with the loss of young people and the already aging demographic.

Appendix D: Other CDF Committee Action Ideas

The actions below were identified by the CDF Committee during their workshop, but were not prioritized through the process or they were found to not meet the selection criteria developed by the group. There are presented here so the ideas are not lost.

1. Create a family place for children/families to gather
2. Improve the Trail Regional Airport lounge
3. Encourage Lower Columbia residents to shop locally more often
4. Provide more adult job training opportunities
5. an integrated recreation centre that benefits all Lower Columbia communities
6. Enhance existing campgrounds and improve marketing efforts to visitors

MTA Conference Expenses: ESTIMATE!!!
Draft July 2018
Based On:
200 people
3 day conference



Food and Beverage Expenses					
Item		Number:	\$ Estimate	GST	Total
Day 1 -					
Reception	(opening and new member)	150	25.00		\$3,750.00
Day 2 -					
Breakfast		150	28.00		\$4,200.00
Morning Coffee	Coffee, Tea, Juice	200	4.75		\$950.00
Lunch		200	35.00		\$7,000.00
Afternoon Coffee	Coffee, Tea, Juice	150	6.00		\$900.00
Social Event		175	30.00		\$5,250.00
Day 3-					\$0.00
Breakfast		130	25.00		\$3,250.00
Morning Coffee	Coffee, Tea, Juice	130	4.75		\$617.50
Lunch		150	35.00		\$5,250.00
Afternoon Coffee	Coffee, Tea, Juice	125	6.00		\$750.00
Dinner		150	70.00		\$10,500.00
		Sub Total Food			\$42,417.50
Item		Number:	\$ Estimate	GST	Total
Audio Visual and Meeting Rooms					
Audio Visual Needs:		Quantity	Cost		
	LCD video projectors	2			
	Screens 12 foot	2			
	Screens 10 feet	2			
	Wireless Mike	5			
	Podium Mike	3			
	Video Switcher	1			
	AV Carts and skirt	3			
	8 channel Audio/Video Mixer	1			
	Technician Set up, Take Down, Delivery		12,000.00		\$12,000.00
	Total of Above				
Room Costs					
	Main Plenary		200.00		\$200.00
	Exhibits		200.00		\$200.00
	Meeting Rooms		200.00		\$200.00

	Office Room and Meeting Room		100.00		\$100.00
	Sub Audio and Mtg room				\$12,700.00
Item		Number:	\$ Estimate	GST	Total
Conference Operations					
Advertising Costs:					
	Website	1	1,000.00		\$1,000.00
	Conference App	1	1,500.00		\$1,500.00
Conference Presentation Costs:					
	Speakers Fees	5	5,000.00		\$25,000.00
	Transportation - tours	1	10,000.00		\$10,000.00
	Entertainment	1	3,000.00		\$3,000.00
	Speakers Gifts	1	1,000.00		\$1,000.00
	Signage (banners etc.)	1	1,000.00		\$1,000.00
	Nametages	1	600.00		\$600.00
Off-Site Conference Costs:	Coordination Fees	1	10,000.00		\$10,000.00
	Delegate Kits	200	12.50		\$2,500.00
	Misc Expenses	1	3,000.00		\$3,000.00
	Office Supplies/Telephone	1	\$ 500.00		\$500.00
	Travel and Pre Conference planning	1	\$ 2,000.00		\$2,000.00
	Sub Conf Operations				\$61,100.00
TOTAL EXPENSES					\$116,217.50



Agreement #:2018070131

Terry Van Horn
Executive Director
Lower Columbia Community Development Team Society
1355 Pine Ave
Trail, British Columbia V1R 4E7

Dear Terry Van Horn:

The BC Rural Dividend Program (the "Program") assists rural communities to reinvigorate and diversify their local economies. Grants are awarded to support projects that contribute to community economic development, economic diversification, and capacity building.

Thank you for your request for funding as outlined in your submission dated July 31, 2018 (application submission date) (the "Proposal"), incorporated into this grant agreement (the "Agreement") as Appendix A – Proposal.

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development (the "Province", "we", "us", or "our" as applicable) is pleased to provide a grant in the amount of \$500,000 to the Lower Columbia Community Development Team Society (the "Recipient", "you", or "your" as applicable) to support the MetalTechAlley 4.0-Sustainability and the Circular Economy (the "Project") as outlined in the Proposal.

Under this grant agreement (the "Agreement") any funds that have not been expended by the agreement end date, or which cannot be committed to the achievement of the Project as outlined in Appendix A-Proposal:

- (a) Must be returned by the Recipient to the Province; or
- (b) May be retained by the Recipient as supplemental funding upon written confirmation from the Province; or
- (c) May be deducted by the Province from any future funding requests submitted by the Recipient and approved by the Province.

This Agreement starts upon March 22, 2019 and ends March 22, 2021. The Recipient will advise the Province immediately of any substantial events that could impact the Project end date as identified in Appendix A - Proposal.

Further to this, the Province requires reporting on the status of achievements in relation to this funding, and financial information, with timing and content of reporting as agreed between the Province and the Recipient. All reporting templates will be provided by the Province. The Recipient will submit an Interim Report on the 31st of May and the 30th of November of each year of the Project duration and a final project report upon project completion but prior to the agreement end date identified in this agreement and will include:

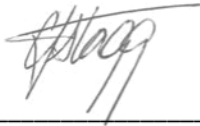
- (a) Confirmation that the Financial Contribution was spent according to the Project defined in Appendix A –Proposal; and
- (b) A description of project deliverables, successes, lessons learned, and outcomes achieved.

Additionally, The Province reserves the right to undertake site visits and/or conduct audits, as identified in Appendix B, Section 4 – Monitoring and Audit.

Furthermore, it is the Recipient's responsibility to ensure that Rural Dividend Funds are not used for ineligible costs. The budget included in Appendix A - Proposal is subject to, but not limited to, the examples of ineligible costs listed in this grant agreement (the "Agreement") identified in Appendix B, Section 3 – Ineligible Costs.

We wish you success in achieving the objectives of this Agreement. Please contact the Program Office at 250-356-7950 if you have any questions or concerns.

Yours truly,



Chris Stagg
Assistant Deputy Minister
Ministry of Forests, Lands, Natural Resource
Operations and Rural Development

March 22, 2019

Date

APPENDIX A – PROPOSAL



Request for support

Reference #: 2018070131

Submitted: Jul 31, 2018

Status: Pending

Contact information

Organization	Lower Columbia Community Development Team Society (LCCDTS)	Primary contact	Terry Van Horn
		Title	Executive Director
Address	1355 Pine Ave Trail, BC, CA V1R 4E7	Phone	250-364-6461
		Mobile	s.22
B/N	S-0056029	Email	tvanhorn@metaltechalley.com
		Signatory Authority	Bill Van Beek
		Title	President
		Phone	250-364-6461
		Mobile	s.22
		Email	bvanbeek@shaw.ca

Organizational profile

Type of organization	Not-for-profit Organization			
Project partners associated	Partner name	Contact name	Phone	Email address
	Fenix Advanced Materials	Don Freschi	250-512-9378	don@fenixam.com
	Teck Metals	Thompson Hickey	250-364-4515	thompson.hickey@teck.com
	KAST	Don Freschi	250-362-5052	info@kast.com
	i4C Innovation Centre	Pilar Portela	s.22	pilar.portela@i4c.tech
	Selkirk College	Terri McDonald	250-365-1434	tmacdonald@selkirk.ca
Destination trails project	No			

Request details

Request type	Partnerships Project (up to \$500,000)
Kind of support	Financial support
Total amount requested	C\$500,000
Total project budget	C\$838,890

Project details

Name of project	MetalTechAlley 4.0-Sustainability and the Circular Economy
Location impacted	Canada - Kootenay - Kootenay Boundary - 1355 Pine Ave.-LCCDTS office
Focus of initiative	Business sector development
Description	<p>With the private and public sectors working together "MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a regional project that will further drive innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies, IIoT & Big Data and Industrial recycling. This project will also support the creation of a sustainability funding model to ensure continued success for the metaltechalley initiative and will include strategies for continued buy-in from our municipal and business leaders.</p> <p>Activities include:</p> <p>Supply Chain Inventory and Gap Analysis:</p> <ul style="list-style-type: none"> • Hire a consultant to inventory our supply chain and by products, identify local opportunities and recommend strategies to improve competitiveness. • Work with partners to research, innovate and create new opportunities to commercialize identified by-products. <p>Building a Circular Economy:</p> <ul style="list-style-type: none"> • Host a circular economy workshop to promote the benefits of building a circular economy and what their role is in ensuring success. • Travel and relationship build with regions who have successfully created a circular economy to understand and learn best practices. • Hire a part time Training Program Director to create, manage and deliver training programs. • Support two research by-product scientists. • Host Jobs of Tomorrow career awareness event • Host an Industry 4.0 School & Industry Night • Attend conferences and regions to market by-product development opportunities and attract researchers and entrepreneurs to further develop by products and create new markets. <p>Marketing and Promotion:</p> <ul style="list-style-type: none"> • Hire a part time Marketing coordinator who will continue to build relationships with Municipal, Provincial and Federal trade officials to further expand our outreach and continue to generate excitement and interest in the region. Promote metaltechalley through various platforms. • Attend targeted conferences and events with speaking engagement opportunities to address larger audiences and continue to broaden our outreach and share the metaltechalley story. • Host a MetalTechAlley Conference. <p>Sustainability of MetalTechAlley:</p> <ul style="list-style-type: none"> • Hire a consultant to review other cluster approaches and recommend solutions that will ensure metaltechalley continues to grow and expand the economy.
Beneficiaries	<p>Trail-7709</p> <p>Rossland-3729</p> <p>Fruitvale-1920</p> <p>Montrose-996</p> <p>Warfield-1680</p> <p>RDKB Area A-1891</p> <p>RDKB Area B-1442</p>

Outcomes & Indicators #1

Outcome Creation of a Sustainability Funding Model that will create a value proposition for the local businesses and elected officials.

Indicators of success \$100,000 of local funding is collected to advance the metaltechalley strategy.

Outcomes & Indicators #2

Outcome Digitally technology trained local youth and engagement and excitement about the career opportunities in digital technologies.

Indicators of success 800 youth participating in workshops and/or training and 5 local youth are hired by local companies.

Outcomes & Indicators #3

Outcome By-products are researched and commercialized.

Indicators of success 2 new companies created from the research and commercialization efforts.

Outcomes & Indicators #4

Outcome Increased interest of the region's opportunities through robust marketing strategies and hosting MTA conference.

Indicators of success 5 new companies attracted to the region and 15 new skilled workforce are attracted to the region.

Outcomes & Indicators #5

Outcome Supply chain inventoried and gaps analyzed.

Indicators of success 3 new business connections are made resulting in reduction of local businesses expenses. 1 new market is found for a local company.

Outcomes & Indicators #6

Outcome Creation of Circular Economy Strategy

Indicators of success 75% buy in from the local businesses.

Outcomes & Indicators #7

Outcome Training programs created for local workforce.

Indicators of success 10 companies participate in the training to diversify or increase skills of employees resulting in productivity increase.

Community Need Addressed This REGIONAL project supports the communities of Rossland, Warfield, Trail, Montrose, Fruitvale and RDKB Areas A&B which are heavily dependent on a single sector employer, Teck Metals, who employs either directly or indirectly over 35% of our local workforce. The LCIC has undertaken significant work in the past 5 years, through Business Retention and Expansion (BRE) efforts, a Foreign Direct Investment Strategy (FDI), and the creation of a the new MetalTechAlley marketing strategy, to find solutions to alleviate the constant cyclical nature of a resourced based economy. Recognizing diversification is essential for continued economic growth for communities in a single sector market the MetalTechAlley 4.0 – Sustainability in a Circular Economy project will continue to drive sustainable economic development in the metals and technology sectors. By continuing to strengthen and expand our expertise in advanced materials and emerging technological expertise this project will strengthen and diversify the local economy and will facilitate the generation of new jobs and new opportunities for workers and their families. It will provide access to new and expanding markets and resources and ensure the region's ability to compete in these new markets. Our residents benefit when our economy is healthy, strong and diverse, building confidence in our businesses, our residents and potential investors considering investing in our community. Building on the success of the previous metaltechalley initiative more work is needed to

ensure:

- continued outreach to the markets that best fit within our cluster.
- the best utilization of our products and services.
- continued exploration and innovation for our by-products.
- our local workforce has the training and skills to lead innovation.
- youth are trained on digital technologies to ensure they are obtaining practical skills to prepare them for employment in a digital world and match the needs of the local workforce.
- sustainability of the metaltechalley program.

Community Strength Increased

This REGIONAL project includes strategies that focus on global competitiveness, sustainability and competitiveness by positioning the region as a leader in the circular economy and focuses on enabling our businesses and their value chains to transition towards a more viable, sustainable and competitive economic model through market research and competitive analysis, continued engagement, education and training. The goal is for our supplies, services and opportunities to be top of mind for target sector companies looking to expand, skilled labor looking for a career, entrepreneurs looking for opportunities and trade officials to promote our region as a global leader in the metals and technology sector. Gaining exposure for the region and these sectors will build global business-to-business connections resulting in transfer of technology, opportunities, referrals, stronger partnerships and/or requests for services, ultimately improving regional unemployment statistics, contributing to corporate tax revenues and attracting investors. It will promote our openness for new business development, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy, ultimately ensuring workforce retention. Based on past engagement results the majority of the local business cited lack of skilled workforce as their biggest barrier to expansion and growth. Support of this program will allow us to go out on a wider scale to market our opportunities to attract the skilled workforce needed to ensure our businesses continue to grow and expand as well as locally develop educational and training programs with Selkirk College and MIDAS that align with our businesses needs, ensuring our local businesses stay healthy and have the ability to access new markets and increase their competitiveness. Supply of raw materials is limited and can be costly but if we can move towards a more circular economy by having an inventoried list of our supply chain, products, and services and with by-product development we can remove pressure on environment, improve the security of the supply of raw materials, increase competitiveness, stimulate innovation and we will boost economic growth and create more jobs locally. Creating a sustainability plan for the metaltechalley strategy that works for our businesses and our economy we will ensure this cluster approach continues to thrive long after funding from RDF.

Project supports innovation

Innovation is not just about creating new ideas; it is about finishing things we start, having the patience and commitment to help innovations go to scale, not just seeding the development of new things. This proposal takes the learnings and momentum we have underway with the MetalTechAlley initiative and move it towards the next steps in driving innovation in our region through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial recycling. Strengthening regional business to business connections and collaboration, showcasing the breadth and depth of our business capabilities and our regions' collaborative efforts to regional and external markets will ensure continued growth and sustainability.

Project creates shared

Since the inception of metaltechalley we have attracted many diverse companies and

prosperity	<p>skilled workforce from foreign countries and have created an on-boarding program to support these entrepreneurs, businesses and employees from all walks of life, making the settlement process smooth and swift. With this support we will to continue to build our resources to ensure this process continues to support all our residents. This approach ensures diversification in gender and ethnicity, educational backgrounds, experience and family statuses enhancing economic growth both at the business and community levels. The project ensures access to all community assets and will ensure shared prosperity by focusing on advancing knowledge of existing work force, promoting investment from local and external businesses and attracting talent from all community areas, from youth to First Nations. By promoting social mobility through education and focusing on training the existing workforce, we are well positioned to decrease economic inequality in our region. Respecting rights and doing good business is as applicable to First Nations as it is to non-First Nations communities. We pride ourselves in the inclusive and regional approach we have taken locally, regionally and externally, with NGOs and the private sector in engaging all our residents to be inclusive. LCIC and LCCDTS are not only open to creating business partnerships and opportunities with First Nations and our communities that are mutually beneficial, it will also encourage innovation through early engagement and a willingness to adapt program offerings that will result in inclusive participation throughout the region, the province and the country. You will notice that as part of the LCIC 's work plan, creating a culture of inclusiveness is one of our key priorities.</p>
Project creates jobs	Yes
Direct fulltime jobs	3
Direct part-time jobs	3
Direct temporary jobs	
Project create employment	<p>Project Coordinator-full time-30 hours a week from Jan 1, 2019-Sept 30, 2020-will run, monitor administer and organise all project activities in cooperation with and under the direction of the LCIC EDO, aiming at the effective execution of the project. This is a temporary permanent position .</p> <p>Researchers-2x-full time-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)- will work with partners to create viable, value add products from by products and create business cases for commercialization.</p> <p>Marketing coordinator-part time-15 hours per week for 104 weeks-create and administer marketing and promotion campaigns through various platforms including social media campaigns, video campaigns, billboard campaign, various print articles and targeted email in-box outreach.</p> <p>Training Program Director-part time-15 hours a week for 104 weeks-to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.</p> <p>Technology Services Coordinator-part time- 8 hours per week for 104 weeks- work with our partners KAST, i4C and MIDAS to support and commercialize new business development to reach new and expanding markets and resources, support the settlement of new arrivals to the region and create strong relationships among service providers.</p>
Economic opportunities for youth	<p>Yes - The ability to retain youth depends greatly on offering jobs that are enticing, sustainable and offer growth opportunities. Quality jobs are at the heart of the resiliency and strength in the community. Transitioning young people from schools and training institutions into the labour market to become a skilled workforce will be achieved by building solid bridges between the world of work and the training programs that this project</p>

is focused on.

By hiring a part time Training Program Director to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.

We will also host an Industry 4.0 School and Industry Night in partnership with UBC-O, Selkirk College and I4C Innovation Centre to foster relationships between the business community and the youth to have a better understanding of the needs of the business community.

Host Jobs of Tomorrow career awareness event for K-12 students at Selkirk college and MIDAS Lab

to generate excitement of digital technologies and the potential for job diversity.

**Potential indirect employment
created**

It is well documented that the variation in indirect job creation multipliers reflect sectoral and regional variations, labor intensity of operations and local labor regulations. Where the metallurgical industry in general has a 6X multiplier, technology is 25X +. Based on regional variations, labor intensity and regulations, we envision a 10X multiplier.

MetalTechAlley 4.0-Sustainability and the Circular Economy includes programs that facilitate job creation through engagement of investor members with private sector clients by targeting investor companies to move, partially or completely, to the region to take advantage of the opportunities bringing at a minimum 1 person per company and more likely a small core team or 3 to 5. Expecting 5 new companies with a minimum of 3 employees over two years we anticipate 150 new jobs in the region. Implementing the next wave of productivity in the metal and IIoT sectors will require these companies to, in turn, expand and hire local staff and use local services again expanding local companies.

**Current community development
plan**

Yes - LCCDTS Strategies:

STRATEGY 2

Increase workforce growth, development and renewal by generating rewarding employment opportunities, by attracting and retaining talent, and by providing accessible education and skill development.

STRATEGY 3

Enhance business growth and development through innovative, regional investment strategies, and by leveraging and showcasing our unique natural and environmental assets.

LCIC Priorities:

Priority 1: Business Development and Investment Attraction

Strategies:

- Leverage Strategic Partnerships
- Promote Assets and Advantages
- Increase Awareness of Region
- Facilitate and Support Local Business needs

Priority 2: Growing and Marketing the MetalTechAlley Platform

Strategies:

- Develop a Circular Economy Mapping strategy to identify gaps and opportunities.
- Target new business or expansion opportunities with existing businesses (raw material by-products and industrial recycling).
- Grow and promote our industrial supply chain.
- Investigate renewable energy project opportunities around blockchain and Industry 4.0

technologies.

Priority 3: Organizational Priorities & Structure Development

Strategies:

- Investigate new funding partners and programs
- Explore sustainability "pay to play" approach

Priority 4: Advancing Progress-Leadership and Culture

Strategies:

- Continued engagement with local leaders
- Establish a welcome and onboarding team
- Establish a campaign to create a culture of openness and inclusion
- Create and promote a culture of technology adoption and pioneering new technologies

Existing community support

Support for moving metaltechalley forward to sustain and diversify our economy has been demonstrated from our regional service providers and the private sector with the increase of financial and in-kind support from most of the partners in this application validating what we are doing is working and our partners see value in the strategy.

By creating a strategically targeted marketing plan that leverages local organizations and enterprises in the metals and technology sectors we have created partnerships with other non metals related organizations to create a similar strategy for their specific needs. Since the creation of the metaltechalley strategy our core funding has been secured for 3 more years and is a direct result of the metaltechalley success.

As well as endorsement and support letters from the Cities of Trail and Rossland, and our local Community Futures Office, contributions from the following organizations and private sector companies range from cash to in-kind support:

KAST (Kootenay Association for Science and Technology), with their team of EiRs (Entrepreneurs in Residence) and local technological experts who provide mentoring services for business growth and stability as well as the MIDAS facility which will continue to provide access to equipment and startups and access to training programs.

Selkirk College will provide ongoing research and analysis related to the project to help build capacity for informed decision making.

Teck Trail Operations: metals industry leader who will provide expert knowledge and cash to support workforce attraction efforts and access to by-products for research and development expertise.

Fenix Advanced Material: will provide cash as well as in-kind support to access equipment, mentoring and expertise in metals.

i4C: will provide cash and in-kind support for entrepreneurs providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting products to market.

Contribution from other	C\$338,889
In-kind contribution from others	C\$83,889
Other organizations providing fund	No
Project start date	Oct 01, 2018
Project end date	Oct 31, 2020
Project duration	24
Project ready to commence	Yes
Key milestones	Project Coordinator hired-Jan 2019 Training Program Director hired-Nov 2018

Marketing Coordinator Hired-Jan 2019
 Technology Services Coordinator hired- Nov 2018
 By product research started by Dec 31, 2018
 Sustainability Funding Model completed – Oct 31, 2020
 Supply chain Inventory and recommendation-Dec, 2019
 Circular Economy Plan-Oct 31, 2020
 180 Digital Technologies Training Workshops completed-Oct 31, 2020
 National Industrial Symbiosis Program Workshop for a Circular Economy-Dec 31, 2018
 Industry 4.0 School and Industry Night-Dec 31, 2019
 10 Stakeholder meetings for buy in and Sustainability-Oct 31, 2020
 MetalTechAlley Conference – Spring 2020
 Europe- research supply chain and Circular economy expertise- fall 2020
 Sudbury- research metallurgical cluster- Partnerships-Winter 2018
 Vancouver-meet with gov officials, global affairs and International Trade officials-
 partnerships 4x--Sept 30, 2020
 Waterloo- research expertise in advanced materials and by-product development-
 Partnerships -Summer 2020
 CIM-2ppl-materials science and technology conference-Winter 2019
 BC Tech Summit -Spring 2019
 Trade Mission to USA - 2ppl -Summer 2019

Creation of 3x digital By-Product Story Maps-Mar 2019
 MTA Webpage upgrades-interactive functions and intuitive applications-Dec 31, 2019
 social media campaigns, video creation, photo bank, billboard campaign, various print
 articles - Sept 30, 2020

Project ongoing Yes

Project continuation A large portion of this application focuses on exploring and learning best practices of a sustainable cluster program and will take these learnings and create a metaltechalley sustainability funding model that will include strategies for continued buy in tailored to our region's businesses, organization's and elected leaders to ensure continued success for the metaltechalley initiative.

As awareness of the metaltechalley initiative continues to expand, our neighboring communities are inquiring how to partner with us on the initiative; as we continue to move forward and get buy in from surrounding communities our capacity will increase and our outreach will continue to grow and expand resulting in economic prosperity for all our communities.

Project management skill There has been incredible interest of the metaltechalley project using a regional cluster approach to drive economic development in a rural community including; 9 Ministry and staff visiting the region, 3 Provincial projects partnerships and 5 speaking engagements in partnership with the Province to promote metaltechalley and the strategy. We have demonstrated and proven we are a results oriented regionally focused organization with support of the private sector and excellent partnerships locally, provincially, nationally and internationally. With the expertise of the LCCDTS/ LCIC staff and board, which consist of over 50 professionals in the region working collaboratively on economic development; these organizations are well situated to support and administer this project.

Terry Van Horn, the Economic Development Officer, lead for the project. Under her leadership the LCIC has been recognized as a leader in economic development activities throughout the Province and in the last four years has won two BCEDA provincial awards and one BCEDA honorable mention award (first time ever awarded) for various Marketing Initiatives that have been undertaken through the LCIC office with limited resources and funding. The LCIC Thriving Metrics dashboard is recognized as an Economic

Development best practice and is featured in the new Provincial Economic Development Metrics Toolkit.

The LCIC has implemented several successful similar projects including a Foreign Direct Investment Strategy which identified expanding the metals and technology sectors as areas of opportunities for the region to grow and diversify. In her seven years as EDO, Terry has leveraged her core funding with funding from private companies, Provincial agencies (RDF, SIDIT, LMP), Federal agencies (ICCI), Columbia Basin Trust, and various other organizations to over \$1.5M. Proving the LCIC is a trusted organization that gets things done collaboratively, on time, within budget and in a professional manner.

Role of project partner

"MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a fundamental link between the resource based local industries and the Industry 4.0 gaps for the commercialization of related products that will be developed by existing community businesses, entrepreneurs and investor businesses interested in relocating to the region and uses project partnerships and resources to fill the gaps. At the centre of metaltechalley is LCIC and LCCDTS in partnership with our local communities regional district and Columbia Basin Trust who have provided the confidence and leadership in championing the project and have committed \$85,000 in cash to use a leverage and buy in.

To ensure our long term goals are met, we have partnered with private sector companies like Teck Metals, the world's largest integrated lead zinc smelter located in Trail BC; Fenix Advanced Materials a successful by-product purification company; who will provide access to expertise, research and testing facilities as well as by-products for further innovation and development; I4C Innovation Centre, the next step in business development, who will support these new entrepreneurs in providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting their products to market. We have also secured partnerships with MIDAS, a metallurgical industrial research and development centre that offers start ups a digital fab lab for rapid prototyping and assistance in business development, as well as access to expertise, equipment and research facilities; KAST for expertise in business development, brokering partnerships, skills attraction, mentoring, commercialization and referrals; Selkirk College and UBCO for brokering partnerships, access to funding streams, data collection, research, innovation, expertise and equipment in development of by products.

Project risks

Based on the previous RDF application, the LCCDTS/LCIC has proven to be a responsible funding recipient with fiscal accountability, reporting culpability with project successes that have exceeded expectations.

Moving towards a circular economy, as with any new way of doing business, may cause some apprehension and friction and be perceived as a threat by some stakeholders, but with good communication and informed decision making that and focusing on the greater benefits like environmental, social and economic impacts will ensure buy in from our residents, businesses, and communities. Finding the right person/s who want to research and be an entrepreneurs will require a very targeted approach. Expanding our reach and continued sharing of our story to a broader audience will continue to help stimulate interest and curiosity and drive growth and prosperity for all our communities. Access to relevant, up to date resources and services to support these new entrepreneurs and employees will be essential to project success ensuring all our partners are educated on the services and resources available will help share the load in ensuring the settlement process for new residents to the region are best supported. Understanding relationship building and brokering products and services take time and resources through this project funding we will continue to broaden our reach, educate our economic leaders and build strong relationships and implement processes that will ensure continued success of metaltechalley.

Creating a sustainability plan that works for all our partners will be a challenge but with continued engagement and education we will find a value proposition that ensures

financial stability for metaltechalley. To ensure goals and deliverables are met a robust monitoring process, as per the previous application, will be implemented and adjusted throughout the progress of the project.

Project include physical infrastructure	No
Destination trails permits/jurisdiction	N/A
Resolution	Motion: To support an application to the BC Rural Dividend Fund for "Metal Tech Alley 4.0 – Sustainability in a Circular Economy ".
Resolution moved by	Don Nutini
Resolution seconded by	Audry Durham
Resolution date	Jul 19, 2018

Instructions

1 Please fill in all fields marked with a red asterisk (*).

2 Use the "Tab" key to move from field to field in order, or the mouse to select any available (white-filled) field.

3 To paste copied information into a cell, you must double-click in the cell before pasting.
Note: do NOT use "Cut" (or Control-X) to remove information from a cell as this may make the application form unreadable.
Use the Delete key to remove information; use "Copy" (or Control-C) to copy information for pasting in another location.
Note: Mac users - do NOT use Numbers as the form will not function properly.

4 Some boxes have drop-down lists where you can select a value; for these boxes, click on the arrow that appears when your cursor is in the box, and select from the list.

5 Please attach completed Project Budget to your Application submission through the Rural Dividend website.

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

1. Project Information

Applicant Name (maximum 250 characters)

Lower Columbia Community Development Team Society (LCCDTS)

e.g. Timberlake Chamber of Commerce

Project Name (maximum 250 characters)

Metal Tech Alley 4.0 - Sustainability in Circular Economy

e.g., Timberlake Farmers' Market Stalls

Funding Stream (select from drop-down list):

Partnerships Project

Using the Program Guide definitions, select a funding stream from the list

Is this a Destination Trail Project?

☐es

2. Project Costs

Provide a detailed breakdown of costs related to project implementation. Totals will be auto-calculated and used in later calculations.

Category	Description of Cost (REQUIRED) (maximum 250 characters)	Costs	Funding
<div>Salary and Wages</div> <div>Provide the following information in the description of cost:</div> <div><div>• job title</div><div>• wage rate</div><div>• number of hours or months of employment</div><div>• if position is existing or is for a new hire</div></div>			

	Project Coordinator (\$60,000 per year)-30 hours per week for 91 weeks-New Hire	\$ 103,350	Rural Dividend
	By-Product Research Scientists (2x)-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)-New Hire	\$ 70,000	Rural Dividend
	Training Program Director - (\$25,000 per year)- \$24/hr for 15 hours a week for 104 weeks-New Hire	\$ 50,000	Other
	Marketing Coordinator - (\$25,000 per year)-\$24/hr at 15 hours per week for 104 weeks-New Hire	\$ 50,000	Rural Dividend
	Technology Services Coordinator- (\$10,000 per year) - \$24/hr for 8 hours per week for 104 weeks-New Hire	\$ 20,000	Other
	Sub-total	\$ 293,350	
Consulting and Professional Fees Provide the following information in the description of cost: • description of the service • name of the consultant / professional providing the service (if known) • length of the contract (may be an estimate)			

	Sustainability Funding Model Consultant-4 month	\$ 40,000	Rural Dividend
	Circular Economy Consultant- 5 month	\$ 50,000	Rural Dividend
	KAST-mentors, expertise, program support-ongoing	\$ 6,200	In-Kind
	Selkirk College-expertise and data research,program support-ongoing	\$ 4,600	In-Kind
	Tech-product development expertise-ongoing	\$ 9,590	In-Kind
	i4C-IIoT commercialization support-ongoing	\$ 5,000	In-Kind
	Lab testing and analysis from outside services-as needed	\$ 10,000	Other
	LCCDTS metallurgical committee expertise-on going	\$ 10,000	In-Kind
	Supply Chain Mapping research- 4 month	\$ 40,000	Rural Dividend
	Sub-total	\$ 175,390	
Travel and Meetings Meals and project travel related expenses must be based on government per diem rates. Provide the following information in the description of cost: • type of travel (air, car, etc.) • destination • number of nights • number of people			

	Europe-2ppl - research supply chain and Circular economy expertise-Partnerships (flights, 7 nights hotel, transportation, meals, etc.)	\$ 12,000	Other
	Sudbury-2 ppl- research metallurgical cluster- Partnerships (flight, 5 nights hotel, per diem, car rental)	\$ 5,000	Other
	Vancouver- 1 ppl-meet with gov officials, global affairs and International Trade officials-partnerships-4x (flight, 2 nights hotel, per diem, car rental)	\$ 6,000	Rural Dividend
	Waterloo- 2 ppl-research expertise in advanced materials and by-product development-Partnerships (flight, 5 nights hotel, per diem, car rental)	\$ 5,000	Other
	CIM-2ppl-materials science and technology conference-(flight, 6 nights hotel, per diem)	\$ 9,500	Other
	BC Tech Summit - 2 ppl x (flight, 3 nights hotel,per diem)	\$ 4,000	Other
	Trade Mission to USA - 2ppl (flight, 3 nights, hotel, per diem)	\$ 7,000	Rural Dividend
	Sub-total	\$ 48,500	
Training Provide the following information in the description of cost: • name/type of course/training • duration of the course/training • number of participants cost is based on • description of related expenses that may be included (ex. room rental, materials & supplies, registration fees)			

(online, brochures, etc.) • if hard copy, how many copies are made (may be an estimate) • if an event, include a description of any related expenses (room rental, refreshments, etc.)			
	Sub-total	\$	195,150

Equipment, Capital and Supplies Provide the following information in the description cost: • description of the item(s) • quantity of item(s), if applicable • description of any wages associated with the item(s) (ex. set-up & installation).	2 workstations for 2 new positions (computers/keyboards/screens/software/desks)	\$	10,000	Rural Dividend
	Research Equipment-pullers/chemicals/glasswear	\$	40,000	Other
	i4C-use of facility equipment and expertise	\$	5,000	In-Kind
	MIDAS facility -use equipment and expertise	\$	12,500	In-Kind
	Fenix Advanced Materials-use of equipment and expertise	\$	12,000	In-Kind
	Sub-total	\$	79,500	

Infrastructure Related Costs Provide the following information in the description of cost: • breakdown of all activities (ex. plumbing, electrical work, etc.) • description of all materials required • description of all wages and/or contractor costs including duration worked & number of employees			
	Sub-total	\$	-

Other Costs Any costs that do not fit under other categories (ex. space or room rentals).			
	Sub-total	\$	-

Total Project Cost		\$	838,890
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3. Project Funding				
Section 3A: Rural Dividend Funding Request				
		Amount \$	% of Total Cost	
Rural Dividend Funding Request	Auto-Calculated from Section 2. Project Costs	\$ 500,000	59.6%	
Section 3B: Applicant Contribution (Required for Single Applicant & Partnerships)				
	Description (REQUIRED) List all source(s) for applicant contribution (ex. reserve funds, partner name, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Applicant Financial Contribution	LCIC/LCCDTS/CBT/City of Trail and Rossland/Villages of Fruitvale, Montrose, Warfield and RDKB Area A&	Yes	\$ 85,000	10.1%
	Teck	Yes	\$ 50,000	6.0%
	Fenix	Yes	\$ 50,000	6.0%
	KAST	Yes	50000	6.0%
	I4C	Yes	\$ 20,000	2.4%
In-Kind Portion of Contribution	Auto-Calculated from Section 2. Project Costs	\$ 83,889	10.0%	
	Sub-total	\$ 338,889	40.4%	
Section 3C: Project Funding (List the remaining source(s) of all contributions to demonstrate how the project will be funded)				
	Additional In-Kind Contributions The remaining amount of in-kind contributions that cannot be applied towards the applicant contribution	Amount \$	% of Total Cost	
In-Kind Contribution	Auto-Calculated from Section 2. Project Costs	\$ 1	0.0%	
	Sub-total	\$ 1	0.0%	
	Description (REQUIRED) Provide the level of government, name of program, etc. (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Government Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
	Description (REQUIRED) List the source(s) of remaining other funds (ex. bank loan, industry, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
Section 3D: Totals				

Sub-total Funding (Sections 3B & 3C)		\$	338,890
Total Project Funding		\$	838,890

4. Summary of Project Costs and Project Funding		
Project Costs	Amount \$	% of Total Cost
Salary and Wages	\$ 293,350	35.0%
Consulting and Profesional Fees	\$ 175,390	20.9%
Travel and Meetings	\$ 48,500	5.8%
Training	\$ 47,000	5.6%
Marketing and Promotion	\$ 195,150	23.3%
Equipment, Capital, and Supplies	\$ 79,500	9.5%
Infrastructure	\$ -	0.0%
Other Costs	\$ -	0.0%
	\$ 838,890	100.0%
Project Funding	Amount \$	% of Total Cost
Rural Dividend Funding	\$ 500,000	59.6%
Applicant Contribution	\$ 338,889	40.4%
Additional In-Kind Contribution	\$ 1	0.0%
Other Government Funding	\$ -	0.0%
Other Funding	\$ -	0.0%
	\$ 838,890	100.0%

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

End of Form - press "Tab" key to return to the beginning

APPENDIX B – PROJECT DETAILS

1. DELIVERABLES

Project Component	Deliverables
Supply Chain and Inventory Gap Analysis	<ul style="list-style-type: none"> • Complete an analysis that inventories the supply chain and by products, identifies local opportunities, and recommends strategies to improve competitiveness. • Create new opportunities to commercialize identified by-products by working with partners.
Circular Economy Mapping Strategy	Develop a circular economy mapping strategy to identify gaps and opportunities
Marketing and Promotion	<ul style="list-style-type: none"> • Hire a Marketing Coordinator to continue to build relationships, promote Metal TechAlley through various platforms, and continue outreach and generate interest in the region. • Develop social media campaigns, video campaigns, billboard campaign, various print articles and communications outreach. • Host a MetalTechAlley conference
Sustainability Funding Model	Complete a sustainability funding model that will include strategies for continued buy-in tailored to the region's businesses, organization's and elected leaders to continued success.

2. PROJECT COSTS & PROJECT FUNDING

For Project costs and project funding, refer to the budget in Appendix A – Proposal. Rural Dividend Funds can be used towards eligible project costs incurred upon submission of application to the Program during the intake. All costs incurred prior to submission of application are ineligible for Rural Dividend funding.

Examples of ineligible costs are listed in this Appendix B, Section 3 Ineligible Costs. It is the Recipient's responsibility to ensure that Rural Dividend Funds are not used for ineligible costs.

3. INELIGIBLE COSTS

The Recipient is responsible for any charges stated in the budget referenced in Appendix A – Proposal that are ineligible including, but not limited to, the examples of ineligible costs listed below.

For inquiries or additional information pertaining to ineligible costs, refer to the Program Guide, available on the website at www.gov.bc.ca/ruraldividend or contact the Program Office.

EXAMPLES OF INELIGIBLE COSTS (including but not limited to the below):

Project Implementation:

- General organizational support costs.
- Any costs associated with administering the project, such as preparing progress reports.
- Costs being claimed under any other programs.
- Costs incurred outside the time periods for the project as outlined in application.
- Costs incurred before the application was submitted.
- Project contingency costs.

Infrastructure:

- Infrastructure related costs that exceed 25% of the total project cost.¹
- Infrastructure that is not tied to a broader project and outcome.
- Traditional municipal infrastructure (water/sewer/road/sidewalk) projects.

Project Management:

- Permits and approvals.
- Legal costs.
- Project-related professional fees payable to the Recipient.

Wages:

- Ongoing costs for existing staff salaries and benefits.

Capital:

- Capital purchases over 25% of total project costs.²
- Capital purchases that are not essential to the implementation of the project.
- Land acquisition.

Marketing/Travel:

- International travel³
- Directly lobbying of any level of government.
- Expenses related to attending conferences and trade shows.

¹ Infrastructure cost limits of 25% are not applicable to Destination Trail projects.

² Capital purchase cost limits of 25% are not applicable to Destination Trail projects.

³ International travel may be approved by the Province subject to a review of the costs by the Province. A review of costs associated with international travel must be requested by the Recipient.

Coordinating/hosting conferences/events.
Remuneration and travel of elected officials

Other:

Academic research that does not deliver concrete actions or tangible benefits.
GST and PST.
Financing costs and interest charges.
Alcohol

4. MONITORING AND AUDIT

The Province reserves the right to, for monitoring and audit purposes, at all reasonable times, on reasonable notice, enter any premises used by the Recipient to deliver the Services or request and keep any documents or records pertaining to the Services, in order for the Province to inspect, audit, examine, review and copy, whether complete or not, that are produced, received or otherwise acquired by the Recipient as a result of this Agreement.

It is the responsibility of the Recipient to ensure cooperation from all partners and third party contributors, in a timely manner, during a review or audit of the Services.

APPENDIX C – MARKETING, PUBLICITY AND COMMUNICATIONS

1. Media events and promotional materials regarding the Project shall not occur without the prior knowledge and agreement of the Province. The Recipient will provide at least 15 working days' notice to the Province's Rural Dividend contact of media events. Media events include, but are not limited to, news conferences, public announcements, official events or ceremonies, news releases, or release of documents.
2. Notice of a media event shall be provided by the Recipient to the Province's Rural Dividend contact. Current contact is:
Ruraldividend@gov.bc.ca

Notification of a new contact may be provided from time to time.

3. Any media event shall take place at a mutually agreed date and location. The Recipient will acknowledge the Financial Contribution made by the Province on any signage, posters, exhibits, pamphlets, brochures, advertising, websites, forms, or other publications produced by the Recipient and related to the Project, in terms satisfactory to the Province.
4. The Recipient will use the Province's logo in acknowledging the financial contribution of the Province. Any and all use by the Recipient of the Provincial logo and statement will be in the form provided by the Province, and will comply with the graphic standards and any conditions communicated, by the Province to the Recipient from time to time. The Province's logo and graphic standards document is incorporated by reference into this Agreement.

The statement to accompany acknowledgement is as follows: "We gratefully acknowledge the financial support of the Province of British Columbia"



Reference: Rural Dividend Program – Approval of Funding

March 22, 2019

Dear Terry Van Horn,

On behalf of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), I am pleased to advise you that a grant of \$500,000 has been awarded from the Rural Dividend Program to Lower Columbia Community Development Team Society for your project (MetalTechAlley 4.0-Sustainability and the Circular Economy).

Please find attached the Grant Agreement for your project. Please review the Grant Agreement in full. If any changes need to be made, please contact the Program Office at 250-356-7950 or ruraldividend@gov.bc.ca.

The Province will be making public announcements about the successful projects in the near future. We require that you keep confidential the confirmation of your funding until it is announced publically by the Province.

Please note that FLNRORD Regional Economic Operations staff are available to provide support for the successful implementation of your project. The Regional Manager for your area is Larry Olson and their contact information is 250.490.8261. Additionally, if you are completing a trail related project we ask that you engage with staff from the Recreation Sites and Trails BC (RSTBC) branch of FLNRORD. If you are not aware of the RSTBC staff for your region please contact the Program Office.

Please note that Grant funding provided by the Rural Dividend Program is project specific. Continued financial support for programs and/or staff positions created through this project should not be anticipated from the Program.

Direct Deposit will occur if you have previously received funding from the Province by direct deposit. Otherwise, the funding award will be administered by cheque.

We appreciate your application and wish you success in your efforts to strengthen your community's resiliency and economic viability. If you have any questions, please contact the Program Office at ruraldividend@gov.bc.ca or at 250-356-7950.

Congratulations, and I wish you every success with your project.

Sincerely,

Chris Stagg, Assistant Deputy Minister
Rural Development, Lands and Innovation Division
Ministry of Forests, Lands, Natural Resource Operations and Rural Development



INDUSTRIAL CLUSTERS AND THE COLUMBIA BASIN – BOUNDARY REGION

A MINING AND METALLURGY SECTOR CASE STUDY

MARCH, 2015



The Columbia Basin Rural Development Institute, at Selkirk College, is a regional research centre with a mandate to support informed decision-making by Columbia Basin-Boundary communities through the provision of information, applied research and related outreach and extension support. Visit www.cbrdi.ca for more information.

EXECUTIVE SUMMARY

Interest in industrial “clusters” has grown under the realization that productivity and innovation seem to blossom in an environment where multiple interests operating within the same sector are arranged in a geographically condensed area. Promotion of industrial clustering has resulted in productivity booms and general improvements in economic conditions for the hosts. Prominent examples of strong clusters include: California’s Silicon Valley, the Swiss banking system, and the Japanese electronics cluster.

Starting with an understanding that productivity improvements are the driving force of economic development, the main drivers of productivity gains are: the quantity and quality of human resources, the quantity and quality of capital, and innovation and technological advance. Clusters, unsurprisingly given the clear linkage between Porter’s Diamond conditions and labour/capital/technology, are linked to high levels of innovation, productivity growth and profit. For these reasons, clusters have been identified as enviable engines of general economic growth for the host regions.

Canada leads mining investments in North and Central America, and receives 16% of global mining investments. Estimates of BC investment in exploration and mine development show \$2.2B being spent in the 2012/13 fiscal year. It is not surprising that British Columbia is home to the world’s highest concentration of exploration and mining companies. Both Toronto and Vancouver have developed financial expertise specific to the mining industry, and, Sudbury has become known as the mining superstore. Mining and mineral processing are alive and thriving in Canada.

The Basin-Boundary region has been recognized as a “cluster” by the Mining Association of Canada. The Basin-Boundary region’s Mining and Metallurgical sector constitutes a high concentration of activity and a significant component of the region’s economy. The “Diamond Conditions” affecting the Mining and Metallurgical sector in the Basin-Boundary region are weakly favourable. It is recommended that the regional interests pursue policies to strengthen these conditions and leverage the region’s advantages where possible.

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INTRODUCTION

The Twentieth Century provided the world with fascinating insights into economic development and growth patterns. Productivity improvements have long been identified as the principle source of economic growth, improvements in standard of living and increased wages (Smith 1776, Lucas 1988, Romer 1986, 1990, Nelson 1981). Post-war North America saw an unprecedented economic boom. The WWII industrial investment efforts translated to a position of economic dominance. As most nations rebuilt shattered infrastructure and capital stocks, North America enjoyed the productivity boom created by their investments in the absence of the monumental destruction experienced in Europe and Asia. As the rest of the world has rebuilt its capital stock and infrastructure around a new technology-driven industrial paradigm, the dominance of the western economic performance has steadily eroded (Monroy 2000). Lagging North American productivity is often attributed to under-investment in our capital stock and insufficient innovation.

Canadian productivity has been found to lag behind many of our Organization for Economic Cooperation and Development (OECD) counterparts. From 2001 to 2009, Canadian productivity grew at 0.7% compared to 1.9% in the US and over 4% in Korea (OECD 2010, OECD StatExtracts, Labour Productivity Growth). Within Canada, British Columbia lags behind the Canadian average (Deloitte 2010). In fact, British Columbia ranks 7th of the 10 Canadian provinces in productivity growth.

Interest in industrial “clusters” has grown under the realization that productivity and innovation seem to blossom in an environment where multiple interests operating within the same sector are arranged in a geographically condensed area. Promotion of industrial clustering has resulted in productivity booms and general improvements in economic conditions for the hosts. Prominent examples of strong clusters include: California’s Silicon Valley, the Swiss banking system, and the Japanese electronics cluster (Porter, 1990).

The Columbia Basin Rural Development Institute (RDI), together with the Lower Columbia Community Development Team Society (LCCDTS) Metallurgical Committee¹ commissioned this literature review / case study. The purpose of this paper is to summarize the pertinent industrial cluster literature and to consider the “cluster” conditions as they apply to the Mining and Metallurgy sector in the Columbia Basin-Boundary region.

The remainder of this paper includes: an overview of economic and management literature focused on industrial clustering, a snapshot of the Canadian, British Columbia and Basin-Boundary Mining and Metals sectors, an analysis of the “cluster conditions” impacting the sector, and concludes with recommendations and considerations for future work.

¹ LCCDTS Metallurgical Committee membership currently includes: Teck Trail Operations, Retrieve Technologies, Valhalla Technologies, Columbia Basin Trust, the National Research Council of Canada (NRC), Community Futures Central Kootenay (CFCK), the Kootenay Association for Science and Technology (KAST), the RDI and Selkirk College

CLUSTER THEORY OVERVIEW

The word “cluster”, in economic and management discussions, commonly refers to a geographic concentration of related businesses. The term was propelled into business discussions in the early 1990s, by Michael Porter. Porter’s influential book, *The Competitive Advantage of Nations* (1998), offers a framework to explain some of the forces that drive industrial concentration, and to understand the source of advantage.

ECONOMIC THEORY

Adam Smith introduced the world to economics, with the *Wealth of Nations* (1776). In his seminal tome, Smith discusses specialization and the concept of comparative advantage. Two parties can gain by trading if each specializes in the production of the good or service that they are relatively better at producing. This idea applies, equally, to individuals and to nations. These writings began to shed light on international trade patterns that could be observed in the world.

David Ricardo elaborated on the concept of specialization and wrote on the *Law of Competitive Advantage* as an extension of Smith’s treatment of international trade patterns (1817). Alfred Marshall, in the *Principles of Economics* (1920), introduced observations on the elevated productivity growth in industrial districts. In 1933, the Heckscher-Ohlin model introduced resource (labour/capital) endowments to explain differences in costs of production and hence patterns of trade specialization and concentration. While the earlier theories explained that trade patterns would emerge, the Heckscher-Ohlin model made the first contribution to understanding the determinants of locating certain industries.

New Trade Theory began to explain intra-industry trade through the works of Paul Krugman (1986). Krugman, using economic models that allowed flexibility of the competitive structure², introduced economies of scale, and the dynamics of their development, to this body of theory. Allowing imperfect competition, or oligopoly market concentration, allowed Krugman to explain the existence of firm dominance and the emergence of economies of scale. Economies of scale were used to account for non-resource endowment factors in explaining trade patterns. However, these explanations still offer little insight into the factors that lead to the *location* of those economies of scale.

The early contributions established a framework to explain trade specialization and inter-industry trade patterns (Canada exporting softwood lumber, or France exporting wine), based on differences in opportunity cost, but did not offer any predictions concerning the location of specialization for intra-industry trade (Indian phone centres servicing parent companies in North America, or Canada and the US trading auto parts back and forth). New trade theory offered a framework that explained the emergence of industrial leaders, intra-industry trade and economies of scale. However, the framework fails to explain the external conditions that permit economies of scale to emerge.

² Trade theorists had typically adopted an assumption of perfectly competitive markets. This is a simplifying assumption that allows economists to build coherent models, but fails to take into consideration alternative (and more typical) market structures.

BUSINESS / MANAGEMENT THEORY (THE COMPETITIVE ENVIRONMENT)

While these developments in economic theory make strides toward understanding general patterns of trade, they offer little insight on the dynamics of cluster formation. Economic theory attributed the location of industrial concentration, or clustering, to chance or government intervention.

In *The Competitive Advantage of Nations*, Porter (1998) established a framework for better understanding both the microeconomic conditions that promote economies of scale, scope and industrial networks, and how these factors contribute to extraordinary growth rates for cluster members. Porter observed that “clusters” demonstrate high levels of innovation and productivity growth, resulting from constant investment in human resources, capital, and innovative technologies. His book elaborates on both the source of these advantages and the nature of the benefits.

Productivity is typically measured as the value of production per unit of input. Regions³ that focus their economic activities on value-added, technologically innovative activities typically realize productivity growth. It is this productivity growth that will improve wages and the living standards of its citizens, while those regions that import sophisticated activities while focusing on low-skill, low-value activities, will experience a long-term erosion of economic prosperity (Porter 1998).

Starting with an understanding that productivity improvements are the driving force of economic development, the main drivers of productivity gains are: the quantity and quality of human resources, the quantity and quality of capital, and innovation and technological advance. Clusters, unsurprisingly given the clear linkage between Diamond conditions and labour/capital/technology, are linked to high levels of innovation, productivity growth and profit. For these reasons, clusters have been identified as enviable engines of general economic growth for the host regions (Porter 2000).

THE DIAMOND MODEL

The Diamond derives its name from the four general corners (the points of the diamond) that create the dynamic microeconomic conditions under which “clusters” will or will not form. The four corners are: 1) Factor Conditions, 2) Demand Conditions, 3) Related and Supporting Industries, and 4) Firm Strategy, Structure & Rivalry. This list has been appended with: 5) Government, and 6) Chance, in as far as both government regulation and chance factor into the dynamic development of the other four conditions. The four points, which represent sources of competitive advantage, are location specific.

Factor Input Conditions

What is it?

Factor inputs refer to: natural resources, human resources, capital resources, physical infrastructure, administrative infrastructure, information infrastructure, and scientific and technological infrastructure.

³ “Regions” can be defined as: countries, provinces, states etc. The concept of a region is conceptually constrained by an area with similar activities and conditions, not necessarily by borders.

Despite the high degree of labour and capital mobility today, in reality highly specialized resources may not be readily available in every location. Resources are sub-classified as *basic* (unskilled labour, raw materials and rudimentary equipment) and *advanced* (skilled labour, innovative equipment and systems). Advanced factor conditions generally require constant reinvestment and innovation. This is particularly true in labour markets, which are strongly linked to education infrastructure.

Why is it important?

Sources of competitive advantage may spring from the existence of plentiful basic resource endowments. For instance, Canada has abundant natural resources so accessing them is relatively inexpensive. Alternatively, competitive advantage may arise by developing advanced factor conditions. For example, the high (per capita) number of engineers and technically advanced science graduates in Japan gives Japan's high-tech sector ready access to innovative employees.

Readily available advanced resources, a large, skilled labour pool and easy access to cutting-edge equipment can improve the competitive position of a firm. These factor conditions improve the competitive position by, for instance, lowering search times to match specific skills/equipment with production needs, providing easy access to equipment service, or financial experts that understand the sector. Innovative products and services tend to provide customers with higher value attributes than those created through cheap basic factors.

Advantages stemming from advanced factor conditions tend to be sustainable and of greater significance. Advanced factor conditions require commitment and continual investment to maintain. This comes with greater uncertainty and a need for vision. Industries that take their advantage from cheap and abundant basic factors face greater difficulty maintaining those advantages. Development of advanced factors elsewhere can usually overshadow any advantage enjoyed from basic factors. Clearly, having solid basic and advanced conditions is optimal.

How is it promoted?

Government can reduce or eliminate regulatory barriers, improve infrastructure, or even offer incentives to firms that encourage investment. Wise policy encourages investment in both human and physical capital. Public support for education will also improve the labour market conditions.

Ultimately, firms must adopt a mindset that recognizes and values investment. These strategies are long-term in nature. Developing sophisticated planning capacity can help reduce investment risk.

Regarding the labour pool, there is a considerable (and growing) body of evidence that indicates that the social and environmental conditions under which labourers live play a significant role in promoting labour productivity (Porter 1990, Nelson 1981, Sabatini 2006). It is becoming impossible to separate social and environmental conditions from the factors that impact productivity growth. All stakeholders should recognize this and protect and enhance social and environmental conditions.

Demand Conditions

What is it?

Demand conditions refer to the Diamond conditions existing in client markets. Specifically, the demand conditions consider the level of sophistication, competition and proximity of clients as this pertains to the relationships enjoyed by members of the focus market.

Why is it important?

Transaction costs refer to any costs (transportation, translation, red-tape, negotiations etc.) incurred in the course of making a trade. Proximity of clients minimizes transportation costs. However, the other non-monetary costs (negotiations on terms of trade, search times, and performing non-core duties etc.) will also be lowered. Proximity allows for more frequent meeting and the development of less formal relationships, for instance. Informal working relationships with clients can speed up negotiations and search times and reduce administrative costs. Any reduction in transaction costs will improve the competitive position of a firm.

Conditions in a firm's local product market likewise influence their drive to innovate. Sophisticated and demanding local customers, those customers whose needs can be used to anticipate customer needs elsewhere, can provide an invaluable incentive to get ahead of the innovation curve. Ideally, extraordinarily sophisticated local demand in specialized segments of the market can be translated to global market trends. In other words, the local clients are setting the bar for innovation in their markets; thus, setting global trends and growing the client market for the cluster.

Strategic collaborations are also a possibility with clients. New product development, processing or joint production may stem from strong inter-industrial relationships. Collaboration is more likely within sophisticated firms, and between firms that enjoy strong informal network relationships.

How is it promoted?

Firms may choose to play an active role in their client markets. This may include: encouraging clients to break into new markets of their own, collaborating with clients on products, services or systems that help them develop, or encouraging new clients to relocate into their sphere of influence.

Governments may, again, examine policy with respect to the incentives and barriers facing those downstream industries.

Related & Supporting Industries

What is it?

Conceptually analogous to Demand Conditions, the conditions in the up-stream industries affect performance of the entire cluster. The presence of sophisticated, locally-based suppliers and of competitive related industries is of enormous importance to the health of a business through reducing transaction costs and facilitating technological innovation.

Why is it important?

The transaction cost argument (from Demand Conditions) is virtually identical for Related and Supporting Industries. The collaboration and innovation arguments are likewise similar.

Competitive market places are a breeding ground for innovation; innovation is a hallmark of competition. Cluster members may collaborate with suppliers on innovation (such as product design / customization, system or service improvements) or influence suppliers' innovative focus if strong working relationships exist. Higher quality, customized input products/services, produced by up-stream suppliers that strive for innovation, will contribute to lowering production costs and/or improving the quality of the final product for cluster members.

How is it promoted?

Firms may choose to play an active role in their supply markets. This may include: collaborating with suppliers on products, services or systems, or encouraging new suppliers to relocate into their sphere of influence. This may take the form of seeding spin-off companies or offering purchase agreements.

Governments may, again, examine policy with respect to the incentives and barriers facing those downstream industries.

Firm Strategy & Rivalry

What is it?

Firm strategy refers to the lens through which businesses view themselves and how that shapes their actions. Firms may see themselves as market leaders (or innovators) or as market followers. Firms may see themselves participating in the global economy or in a more localized market. Strategies and actions are derived through these lenses and will be quite different depending on the view firms take.

Rivalry refers to the level of competition in the firm's market. Many competitors, who have largely eliminated price competition, are hallmarks of a highly rivalrous market. Few competitors, who do not bother to price compete, are hallmarks of a non-competitive market.

Why is it important?

The level of competition, or rivalry, a firm faces greatly influences the firm's drive to innovate. The more competitive the marketplace, the greater the gains to be made from innovation in technology, products or processes (Lipsey & Ragan 2010, Porter 1990). Competition forces firms to perform at the top of their game. With little competition, there is little motivation to improve upon the status quo. Lack of competition allows firms to rest on their laurels. In this context, competition encourages appropriate forms of investment and sustained upgrading.

Highly competitive market places tend to work through price competition first and to force competitors to offer lowest possible prices. This means that there is usually little room left for price competition in highly competitive markets. Furthermore, all firms likely enjoy the same access to factor resources.

If profit margins eliminate the ability to price compete, a firm must develop a production technology that lowers costs, or develop new products/services where no competition exists. New technologies open the profit margin until competitors catch up. New product markets will allow firms to charge a premium until they are imitated. This is a well-established

characteristic of competitive marketplaces (Lipsey & Ragan, 2010). Competitive pressures breed innovation which, if successful, improves productivity.

Furthermore, the strategy of the firm plays an important role in generating benefits. Firms may operate with a regional or international frame of reference. The same firms may position themselves in different roles within the sectoral economy (market leader, market innovator, niche market service provider, etc.). Strategic positions can influence the existence of innovations (if the firm positions itself as a market leader) of the location of those innovations. If the firm is positioned in the global market, it may strategically move portions of its operations to take best advantage of local conditions. In other words, it may focus its R&D / innovation in one region that has solid advanced factor market conditions, and move its more mundane operations to a region with cheaper basic factors.

Finally, a concentrated local market may open opportunities for strategic alliances between cluster members. In rural communities, business clusters can be a powerful way to mitigate high costs associated with relative isolation (Porter 2004). Implicit transaction costs, such as search time or negotiations, can be reduced through participation in a less formal network. These networks develop more readily and rapidly amongst participants that are close.

How is it promoted?

Internally, firms may engage in strategic planning, skills training at the management and executive level. Outwardly, firms may encourage competitors to locate within their region, or encourage the development of spin-off companies. Ultimately, adoption of long-term strategies and a progressive mindset are required for sophisticated engagement and cluster development.

CRITICISMS OF THE DIAMOND MODEL

There have been a number of criticisms of Porter's model. Criticisms have focused on two principle themes: its validity as a workable quantitative model (mainly stemming from economists), and the interpretation and application of assumptions regarding jurisdictions and geographic regions (mainly stemming from the management and administration field).

Economists have criticized Porter's Diamond for a lack of supporting empirical research. Porter's treatment of the Diamond makes few distinctions between theories, facts and conjecture (Waverman 1995: 70). The model, as such, does not offer much in terms of predicative power and suffers from typical partial-equilibrium modelling issues⁴

Management theorists bristle at the limited scope of the model. Failing to consider the impacts of trading partners' diamond conditions is short-sighted given the level of international integration in

⁴ Economic theory typically engages in two types of market equilibrium analysis: partial equilibrium and general equilibrium. Partial equilibrium analysis is based on a restricted set of data (i.e. the price of a single product), while all other factors are assumed constant. General equilibrium analysis models interdependence between all factors. It is typical that results from partial equilibrium analytical models do not perfectly agree with general equilibrium analytical models (because they do not allow for adjustment in related markets), but they are still commonly used for their simplicity and ability to analyse specific phenomena.

today's global economy. It is unrealistic to believe that international conditions are of no consequence. However, Porter's Diamond model can be, and has been, modified to reflect evolving theories.

Modification of the Diamond Model

Rugman (1990) modified Porter's Diamond by considering the Diamond conditions in the major trading partner. While still relevant, international borders are playing a smaller and smaller role in locating production facilities. Business is commonly conducted between companies and overseas clients. Many companies operate facilities in more than one country while moving product from one to be used as an input in the other. This modern-day fact forces us to accept that the Diamond conditions in close trading partners have an impact on competitiveness.

BENEFITS GENERATED BY CLUSTERS (AND STRONG DIAMOND CONDITIONS)

Starting with an understanding that productivity improvements are the driving force of economic development, the main drivers of productivity gains are: the quantity and quality of human resources, the quantity and quality of capital, and innovation and technological advance. Clusters, unsurprisingly given the clear linkage between Diamond conditions and labour/capital/technology, are linked to high levels of innovation, productivity growth and profit. For these reasons, clusters have been identified as enviable engines of general economic growth for the host regions (Porter 2000).

Specifically, clusters tend to generate tight networks. These networks are evident between firms (both competitors and trading partners) and between employees. Firms, through collaboration, information sharing, resource sharing and mapping, and collectively attracting a pool of highly-qualified labour, enjoy accelerated productivity improvements. Their transaction costs are lowered, allowing for increased focus on core activities and innovation. And, these networks of communication likewise accelerate the innovative process by increasing the number of creative and innovative participants sharing ideas.

Employee networks are equally important, if often less formal. Increasing the concentration and sheer numbers of people with like education, training, and experiences naturally leads to the establishment of informal networks of communication. This support network transmits information on job opportunities, for those searching, and discussions of interesting technical issues, for those innovating. In both cases, firms benefit from the strength of their employees' networks, with results leading to greater innovation and productivity gains.

Development of collaborative partnerships is another characteristic of clusters and of industrial concentrations. Collaborations may also be seen as an extension of solid networks. Collaborations may lead to new products, processes, or systems or they may lead to the development of new markets, or even to joint production (innovation in management structure). In some instances, collaboration has led to the development of formal research centres.

THE IMPORTANCE OF RESEARCH AND DEVELOPMENT

The role of innovation in improving productivity is the most difficult to understand. Research and development (R&D) is undertaken to develop new products, new capital, new processes and new techniques. In a rural context, innovation may also be focused on gaining economies of scale. While there is widespread agreement that R&D is critical to technological improvement (Solow 1957, Griliches 1979), attributing a direct result or quantifying the impacts on productivity is difficult to accomplish for a number of reasons.

Returns from R&D are uncertain. There is no acknowledged guarantee that engaging in R&D will create financial returns for the firm. The options that are open to a researcher are vague by nature. Knowing, or feeling remotely certain, that the choices made will turn out to be the correct one is virtually impossible. Coupled with the risk that a competitor will make "the discovery" first, the concrete benefits of engaging in R&D are highly uncertain.

Innovation and R&D contribute spillover effects to other stakeholders as well. New processes and new products become publicly observable once developed (Griliches 1979). So, the profits, while

accruing principally to the innovators, are quickly sought by imitators. The extent of spillover effects will depend on the concentration of competitors and the publicity generated around the innovation. Because these spillover effects originate outside of the control of the affected firm, it is virtually impossible to quantify the relationship.

Collaboration, then, makes perfect sense. All of the beneficiaries of technology, and its spill-over, contribute to the R&D efforts. Risks associated with R&D efforts are shared. Collaboration also leverages the R&D budgets of stakeholders that might be individually too small to accomplish major breakthroughs. Many “clusters” are host to highly developed research centres; some are supported by post-secondary or government backing, others are entirely industry supported.

DEVELOPMENT OF A CLUSTER

Regional strengths develop over time. A region will have natural strengths and natural weaknesses. These natural strengths and weaknesses will evolve. Left to their own, they will develop in an unmanaged manner. While this may work out by good fortune, a region may greatly improve the chances of favourable conditions emerging by managing their development path.

Diamond conditions include basic factors (which tend to develop through natural endowments) and advanced factors (which tend to be encouraged, or built by design and conscious effort). Evidence suggests that the advanced Diamond conditions lead to higher growth rates and more sustained competitive advantage. Understanding the dynamics of the relationships between the Diamond conditions, and accepting that advanced conditions must be actively created, permits regional stakeholders to wrest some level of control over their development path.

GOVERNMENT / PUBLIC INFRASTRUCTURE

We can start by discussing the role of public investment in infrastructure. Infrastructure includes the education system to the transportation system, from stabilizing banking regulations to the government's administrative infrastructure. While these factors are outside of the control of a sub-region, such as the Basin-Boundary region, they do lay the foundation for all other Diamond conditions. Our interests, then, are well-served by encouraging our public service to continually invest, set high performance standards, and administer in as efficient a manner as possible.

STRONG FACTOR CONDITIONS

In developing strong, or advanced Factor Conditions, Firm Strategy & Rivalry creates strong incentives. An active and competitive market can trigger the development of post-secondary programs focused on the industry in question, either by sector investment or through institutional responses to market conditions. Observable competitive markets may attract increased public investment in training or research centres. If the industry is perceived as prestigious or important, interest in focused skills development and public spending will be more rapidly grown.

Industry, then, has a strong incentive to organize through formal or informal networks. The collective voices of a strong network are more likely to attract the attention of policy makers. Similarly, a motivated industrial cluster may invest hard funds, themselves, in the development of formal training programs serving their membership. Acting collectively may greatly defray these costs.

Conditions in the Related & Supporting Industries also influence the development of Factor Conditions. Strong Diamond conditions in Related and Supporting Industries stimulate Factor Conditions specific to their sector. There are usually transferrable skills developed between related industries. Understanding this, stakeholders (both industrial and policy-makers) may actively encourage both competitors and supporting industries to locate within the cluster.

Demand Conditions can also accelerate the development of advanced Factor Conditions. Sophisticated local demand will tend to draw both social and private investment into the development of advanced factor conditions. Advanced and specialized factors tend to gravitate naturally and quickly to observable local needs. Again, stakeholders should remain aware of these conditions and actively encourage development.

STRONG DEMAND CONDITIONS

Evidence suggests that competition for the business of local (or regional) buyers can hasten the sophistication of those local clients (Porter 1998). Aggressive pricing, in an effort to win local business, creates favourable input pricing conditions for the local Demand (downstream) market, thus building their overall performance. Likewise, the introduction of innovative products or new technologies that occur in the local market before showing up in foreign downstream markets can help the profits in the local downstream market.

Actions by cluster members can actually stimulate demand in the local downstream market, both in terms of quantity and in raising the level of sophistication in that client market. Fostering or facilitating these developments in the local downstream market may also attract business from that sector's international competitors.

Cluster members have a strong incentive to innovate to provide their clients with the greatest competitive advantage possible. Similarly, cluster members have a strong incentive to enter into innovative collaborations for the same reasons. Innovations (and for that matter, a vibrant labour pool of highly-qualified people) may also have spill-over effects, even when focused on the host cluster market.

Local firms can encourage the development of high-quality, highly specialized labour by working with post-secondary institutions (to build skills development), with municipal and regional governments (to leverage efficient local infrastructure) and directly with their suppliers.

STRONG RELATED & SUPPORTING INDUSTRY CONDITIONS

While there is little a firm can do to influence the location of their existing suppliers, they can be supportive of new providers in the region. There may be growing pains, but developing competent local suppliers of inputs and services could easily pay off many times over. And, businesses could help develop ties between their suppliers and other regional competitors. This may help build the regional importance to their suppliers.

Strong firm rivalry in the host-cluster market will, again (like the discussion for Strong Demand Conditions), stimulate the development of strong conditions in the upstream, or supporting and related industries. Strong competition will encourage sophistication, innovation and creativity in the upstream market. The potential to build business with a sophisticated group of competitors will stimulate innovation upstream.

STRONG FIRM STRATEGY & RIVALRY

Each of the other Diamond Conditions will have an impact on Firm Strategy & Rivalry. Encouraging competition, facilitating new entrants, and prompting technological advances, the other Diamond Conditions can stimulate development of both rivalry and sophisticated strategy.

Factor conditions may influence the development of Firm Strategy & Rivalry primarily by stimulating spin-offs. One of the hallmarks of strong Factor conditions is the existence of post-secondary or industry-funded research centres.

Cluster development opens the doors to complementary economies. Buying power is greater in numbers. There are opportunities for shared marketing campaigns, and customers enjoy a wider

range of complementary products that enhance their experience. There has been a strong correlation found between the strength of clusters and regional growth and development (Porter 2000). Clusters reduce the costs of finding specialized built capital and human capital. Clusters facilitate collaborative enterprise and innovation. Anything the business community can do to foster cluster development will be well worth the efforts.

NETWORK CONSIDERATIONS

Networks play a prominent role in clusters. Networks are a dynamic environment. Each network will develop its own hierarchical structure with a unique level of organization that is created by its membership. Each network will form its own level of commitment and cooperation according to the needs and abilities of its members. Cluster networks develop in two important directions: intra-industry (with competitors), and inter-industry (upstream and downstream stakeholders). Cluster networks tend to foster both strategic and technological collaborations in both inter and intra-industry arenas.

Strategic collaborations may take the form of pooling resources on contracts or projects that would be out of collaborators' individual capacities, supporting education programs or trade organizations, for instance. These types of collaborations could be formed between competitors or related industries. Regardless of who participates, the opportunities for collaboration are greatly increased by stronger networks.

Technological collaboration may focus on new product design, product improvement, new machinery or equipment development, or system redesign, for instance. One might expect inter-industry technological partnerships to be generally focused on improving capital or processes, and intra-industry partnerships to be focused on improving the quality of output (either from upstream producers, or to cluster clients).

The value of cluster networks is augmented by the concentration within the labour pool. A concentration of related firms draws skilled and specialized labour. Informal employee networks typically form through the shared interests of the individuals participating in that sector's labour pool. These informal labour networks expedite the formation of the more formal cluster networks through collegial discussions and the relationships that are formed. These relationships give otherwise independent workers a familiarity with the projects that are occurring within the region, thus creating a shared culture of innovation.

NETWORK MANAGEMENT

There are a number of perspectives that need to be considered with the successful management of a network. Networks are typically voluntary; the usual management hierarchies may need to be modified in order to maintain the health of the internal relationships. Networks require consideration of three principle facets of management: governance, network management, and 'within' network management.

Governance

The governance of a network lays out the incentives and values that will govern the nature of network relationships. Contracts and formal agreements will offer concrete incentives for participation and cooperation, whereas reliance on trust and shared values creates an overall

sense of shared purpose to guide actions. Elements of both types of governance tools will be required in any network to ensure appropriate participation from members. Notably, the governance element of management is the only aspect that is an external influence on the network, as governance is establishing the objective standards to be applied to the entire network. Governance arrangements may be set out in a network charter, systems of recognized roles, or quasi-mandatory roles etc.

Management of the Network

A network must be managed as an entity in itself. A network must have its boundaries and functions defined through the membership in order to set appropriate expectations for members. Network members must have a clear idea of how they may participate in the network and what benefits they may receive. A network should have clearly defined recruitment goals and tools. The functions and boundaries of the network should be well and clearly established. Defining these elements of management allow firm expectation setting and a more purposeful participation in the activities of the network.

Managing Within the Network

Networks should be managed from within to effectively execute their purpose. Roles of peer-members must be established and accepted. The reach, or directive power, of members must be established (as best one can) *ex-ante*. Systems for the establishment of shared approaches and strategies are easier to implement if well understood and agreed upon. Rules governing the sharing and implementation of innovations by network members should also be set as early as possible.

ROLES OF NETWORK PARTICIPANTS

The development of networks facilitates the flow of cluster benefits and vice versa. Better understanding of the roles played in networks may allow stakeholders to speed up the building of beneficial networks. Networks form around a number of central stakeholders. These stakeholders play specific roles in the network:

- **Broker Nodes** are those individuals that activate and mobilize networks
- **Charismatic Nodes** build network membership and enthusiasm
- **Legitimate Nodes** are stakeholders with legitimate license to make binding decisions
- **Bridge Nodes** are people that bridge otherwise unrelated network participants.

Cluster research also points to a special role for the central large firm in a cluster's network. A strong, dominant firm, committed to the cluster, can act as a catalyst. In terms of nodes, the large dominant firm has particular potential to perform as the **broker node** and the **legitimate node**. The big player is a more natural host for network activities and most likely to have broker type connections. They are also most likely source of spin-off projects. Finally, the dominant firm has the resources to make significant binding decisions.

GOALS OF A NETWORK

In the end, members are looking for a network which is:

- Centrally positioned within the range of interests of network members
- Subject to a well-defined mandate and governance structure

- Inclusive yet voluntary
- Of a manageable and effective size
- Cohesive, with clear strategies for maintaining that cohesion
- Not dominated by the interests of the strongest member
- Responsive to member needs.

MEASURING INNOVATION

Benchmarking is an important part of measuring project success or performance against an objective standard. Innovation and technological improvement are difficult to measure. Given the importance of productivity and innovation in defining the success of a “cluster”, benchmarking and tracking improvements in performance within the cluster should be undertaken by stakeholders, or by the network. The following are some suggestions for a number of proxies:

- | | |
|-------------------------------------------|------------------------------------|
| • Spending on R&D | • Capital spending |
| • Measures of productivity (GDP / Worker) | • Capital / worker |
| • R&D intensity (R&D / GDP) | • Machinery & equipment / worker |
| • Share of R&D personnel in workforce | • Average years education / worker |

MINING AND METALS SECTOR OVERVIEW

Canada has a rich history of exploration. The Geological Survey of Canada was established in 1842, directed to explore, map and assess the resource base of Canada. The exploration culture has been and continues to be on the leading edge⁵. There has been a continued commitment to modern and advanced equipment and technology, with the GSC introducing the world to aerial mapping techniques and continuing to make advances in sub-oceanic surveying. The exploration culture is well-developed in Canada

Today, Canada is a world leader in mining. Mining and metals processing is active and important in the Canadian economy. According to the Mining Association of Canada (MAC), Canada is one of the top-ten global producers of 17 metals (Canadian Chamber of Commerce 2012). British Columbia (BC) is Canada's largest producer of copper and the largest exporter of metallurgical coal (Ministry of Energy, Mines, and Natural Gas 2013). According to the Coal Association of Canada, BC is the world's third largest metallurgical coal producer.

Canada leads mining investments in North and Central America, and receives 16% of global mining investments (Marshall 2013). Estimates of BC investment in exploration and mine development show \$2.2B being spent in the 2012/13 fiscal year. It is not surprising that British Columbia is home to the world's highest concentration of exploration and mining companies. Both Toronto and Vancouver have developed financial expertise specific to the mining industry, and, Sudbury has become known as the mining super-store. Mining and mineral processing are alive and thriving in Canada.

There are currently (approximately) 1670 mining companies listed on the Toronto Stock Exchange (TSX) and TSX Venture Exchange. Of these 962 are located in British Columbia. There are, of course, mining companies not listed on the exchange. Estimates indicate there are roughly 1200 exploration companies in BC (British Columbia Securities Commission 2012).

British Columbia mineral production was valued at \$8.6B in 2011, compared to \$10.7B in Ontario (Ontario Mining Association 2013). Mineral production represents roughly 4% of BC's 2011 GDP. Canadian Mining, Quarrying and Gas represented 3.4% of Canada's GDP. BC, by comparison, is a mining province even before considering oil and gas production.

In British Columbia, there are ten coal mines (representing over 40% of Canadian coal production), nine metal mines, 30 industrial mineral mines and more than 50 aggregate mines. Employment from these mines, alone, is roughly 12, 500 people. The current provincial government is expecting to approve the opening of an additional eight mines and the expansion of nine existing mines (Ministry of Energy Mines and Natural Gas, 2013).

According to a 2012 PriceWaterhouseCoopers report, maintenance of the skilled workforce is expected to be a defining challenge over the next decade. Fewer youth have been entering the field, and there is a large cohort expected to retire in the near term. Despite the jobs forecasts, new entrants are not seemingly attracted to the sector.

⁵ Canada's GSC received their first accolades at the 1855 Universal Exposition in Paris. Only two years later, Canada's Director of the GSC was knighted by the Queen for exceptional service.

MINING AND METALS CLUSTER CASE STUDIES

During the course of this research, a number of striking Mining and Metallurgical sector success stories were discovered. Sudbury is often cited as the Mining Superstore; a play on its burgeoning Mining Supply and Services sector. Toronto and Vancouver are heralded as mining finance centres. In addition, Australia has a number of regions that have built their fortunes on mining and metals.

SUDBURY

Ontario currently has over 40 mine sites operating across the province. Nickel, gold, copper, zinc and platinum are Ontario's main metals. Non-metallic minerals include: salt, gypsum, talc, calcium carbonate, and nepheline syenite amongst others. The value of Ontario's mineral production was \$10.7B in 2011, according to the Ontario Mining Association (OMA). Roughly \$4B was invested back in R&D, exploration, construction and equipment. Of this, nearly a quarter was spent on exploration.

Sudbury, ON, has become known as the **Mining Superstore**, and one of the world's "Four Great Mining Cities" (Robinson, 2004). This moniker is derived from the cutting-edge Mine Supply and Service sector that has emerged on the back of Sudbury's mining activities. The Mining Supply and Service sector produces over \$5B/yr in GDP, while employing over 20,000 people (OMA 2013). Sudbury is widely recognized as the centre of the strongest mining-centric cluster in Canada.

SUDBURY'S DIAMOND CONDITIONS

The following is a brief summary of the Diamond Conditions that exist in Sudbury.

Factor Conditions

- Over one-third of Ontario's mining employment is located in Sudbury
 - Over 14,000 jobs with 320 companies
 - Average weekly Ontario mining wage is 60% higher than the provincial average
- Enjoys the basic labour skills development provided by the Canadian publicly-funded education system
- Home to Laurentian University
 - Goodman School of Mines
 - Bharti School of Engineering
 - Over half of research dollars are directed to mining related research
- Home to Cambrian College, College Boreal and Canador College
 - Each with mining focused programming
- Home to the Mining Intelligence Centre
 - Sudbury and Area Mining Supply & Service Association (SAMSSA)
 - Privately funded research and innovation focused institutional membership includes:
 - Centre for Excellence in Mining Innovation (CEMI)
 - Mining Innovation Rehabilitation and Applied Research Corporation (MIRARCO)

Demand Conditions

- Almost two-thirds of the value of mineral commodities is exported
 - \$12B in Trade Surplus in 2011
- Almost 60% of the metals minerals are processed domestically
 - Domestic processors are also major importers of raw material from Australia and the United States

Supporting & Related Industry Conditions

- Mining Supply and Service Industry is equal in size to the mining industry in Sudbury, by employment
 - 25,000 jobs in Ontario with 1000 companies in Ontario
 - Sudbury's Supply and Service sector creates \$5.6B/yr in GDP
- Cutting edge mining equipment producers
- 90% of inputs to the mining sector are sourced domestically
 - Over 40% from a one-hour radius of mine-sites
- Mining and Mineral Exploration Financial expertise is relatively close, in Toronto

Firm Strategy & Rivalry Conditions

- Over 300 related companies
- Innovation in mining safety
 - Regarded as one of the safest industrial jurisdictions in the world
 - Reduced "Lost Injury Time" by 90% over 30 years
- Innovation in environmental stewardship
 - Over \$60M/yr on environmental related technologies (capital expenditure)
- Commitment to innovation and R&D demonstrated through industry support of SAMSSA and the "Mining Intelligence Centre"

Salient Features of Sudbury's Cluster

- Earned its place in the mining world through the development of mines, mills and refineries on the basis of nickel production. Favourable basic resource conditions permitted the establishment of the regional sector. The following demonstrate the subsequent commitment to innovation and sophisticated collaborative investment.
- Recognition of "cluster" network was only reached in the last ten years; despite the extraordinary importance of the cluster to the Sudbury region. Lack of recognition may have stemmed from the diversity of the cluster (it has membership from at least 17 separate industries, as defined by the North American Industry Classification System).
- Cluster members suggest the following have been critical success factors
 - Strong local demand provides a "sales anchor"
 - Strong Supplier & Related Industries
 - Highly skilled labour pool
 - Research institutions and training facilities

- Physical infrastructure
- Quality of knowledge in the community of workers
- Public Private Partnership in the creation of joint research facilities is a feature found in many innovative clusters
- Industrial partners, through industry associations, jointly branded and marketed their collective expertise in underground mining and associated equipment and services
- SAMSSA has worked to develop formal educational opportunities, training support and research institutions

TORONTO AND VANCOUVER

The following is a brief summary of the Diamond Conditions that exist in Toronto and Vancouver. Despite their geographic distance from one another, they are treated together because of the common capital financing theme. These two cities are the mining-centric finance centres in Canada.

Factor Conditions

- Both Toronto and Vancouver are home to several top-tier universities
 - University of Toronto, Ryerson University
 - University of British Columbia, Simon Fraser University
 - More within one-hour travel:
 - MacMaster University, University of Guelph, University of Victoria
 - Many colleges within these regions, too.
- Both Toronto and Vancouver are world-class financial centres
 - As home to Canada's Commodities and Exploration Securities exchanges, these cities have large and well educated labour pools
 - Highly specialized financial expertise has developed, in these labour pools, that is specific to the mining and mining exploration related industries
 - Understanding of specific risk profiles and typical business cycles
- Vancouver is home to one of the world's highest concentrations of:
 - Exploration experts
 - Geologists
 - Mine engineers
 - Project financing experts, and
 - Environmental specialists

Demand Conditions

- Over 1,200 exploration companies are based in BC, most of which are in Vancouver
- The Toronto Stock Exchange lists an impressive 57% of the *world's* publicly listed mining companies
 - Several dozen base their head-quarters in Toronto
 - Estimated combined equity valuation of these companies is over \$19B

Supporting & Related Industry Conditions

- Both Toronto and Vancouver have internationally recognized financial sectors
 - Expertise spills over and complements mining specific financial experts
- The industries supporting more generalized financial sectors have transferrable expertise and services

Firm Strategy & Rivalry Conditions

- The Financial Services sector is competitive, with many participants
- Firms look internationally for their strategy, as evidenced by the international market share enjoyed by our domestic service providers

Salient Features of Vancouver's and Toronto's Mining, Mineral Exploration Financing Cluster

- Listing 57% of the entire world's publicly listed mining companies

AUSTRALIA

Like Canada, Australia has a long diverse history of mining. Australia's industrial mining started, in earnest, in the 1840s. Like Canada, mining tradition and skills were imported from the UK, establishing a culture of mining and exploration (van Eenennaam 2011).

Mining is booming in Australia. The share of Gross Value Added (GVA) derived from the resource economy in Australia has more than doubled in the past decade. Directly, mining and processing contribute 11.5% of Australian GVA, while related sectors contribute 6.5%. These sectors employ roughly one in ten Australians.

Activity is concentrated in the Northern and Western regions of Australia. Western Australia, alone, produces over \$48B GDP from mining activities, employing over 70,000 workers. Iron Ore accounts for over half the value of mineral sales. Australia is also a significant gold and aluminum producer.

AUSTRALIA'S DIAMOND CONDITIONS

The following is a brief summary of the Diamond Conditions that exist in Australia's Mining Cluster.

Factor Conditions

- Insufficient local skills in the labour pool in some remote communities
 - Stakeholders often have to operate fly-in / fly-out operations
- High electricity / power costs
 - Spurred innovation in power efficiency technologies
- Labour force is aging with decreasing interest in mining sector

Demand Conditions

- Mineral exports are very important to the sector, with over a third going to China
 - Over 70% of iron ore is exported
 - 27% of alumina are exported
 - 45% of gold is exported

- Domestic demand is small compared to the export market

Supporting & Related Industry Conditions

- Mining equipment firms are establishing in Western Australia
 - High concentration of market power in upstream markets
 - Low levels of domestic competition
 - High input prices
 - Low levels of customization / sophistication
- Refining and processing facilities mostly located in ports
- Easy and cheap access to the ocean
 - Inexpensive transportation
- Other transportation intensive industries exist
 - In particular, agriculture
 - Combined volumes make ports more financially feasible
- Collaboration with Tourism sector
 - Promote infrastructure development
 - Promote region as labour destination/field

Firm Strategy & Rivalry Conditions

- Significant barriers to entry prevent high levels of competition in certain regions
 - The Pilbara region (the largest iron ore exporter) has high concentration of industrial power
 - Two companies privately own the rail lines
 - Form barriers to entry into region's productive economy
- Easy access to the ocean creates positive export conditions
 - Many firms position themselves in the international market
- Competition is not high
 - Firms view themselves as primary producers – commodity producers
 - World prices, little value-added
 - Firms do not compete on price, but on:
 - Environmental innovation
 - Access to labour markets
- Innovation in environmental stewardship and management
 - Function of inhospitable climate
 - Water extraction and management innovations
 - Renewable energy technology implemented
- Commitment to cutting edge capital technology
 - Over \$21B of investment in capital (2009)
 - 71% of all investment spending in Western Australia

Salient Features of Australia's Cluster

- Darwin's (one of Western Australia's mining cities) Mining Services Sector was initially developed because Darwin's remoteness made it expensive to import services.
- Heavy public investment in infrastructure
 - Services, roads, education
 - While not always located in mining communities, Australia's top-rate post-secondary school system is credited with creating a well-qualified (if not plentiful) labour pool.
- Mining focused vocational schools exist within the region
- Collaborative projects emerge where firms:
 - Form networks and a culture of cooperation
 - Cooperate in winning larger contracts than they could otherwise handle
 - Build capacity and certifications
 - Right-size contracts (large firms design contracts so smaller firms can bid)
- Access to post-secondary, mining focused research institutes has been helpful

BASIN-BOUNDARY MINING AND METALLURGY SECTOR DIAMOND CONDITIONS

The Basin-Boundary region has been recognized as a “cluster” by the Mining Association of Canada. The term cluster is often misused to mean any collection of similar firms in a geographic region. The meaning developed through the formal literature on the topic is more exclusive. While the Basin-Boundary region’s Mining and Metallurgical sector may not be a “cluster” in the strictest definition by Porter’s hierarchy (Porter 1998), it does constitute a high concentration of activity and a significant component of the region’s economy. In order to provide a useful benchmark for the region, the following provides an assessment of the “Diamond Conditions” affecting the Mining and Metallurgical sector in the Basin-Boundary region.

REGIONAL FACTOR INPUT CONDITIONS

BASIC RESOURCES

Labour: Canada provides an excellent public education system that provides basic skills development.

Natural Resources: Plentiful mineral resource reserves exist in the region.

Capital: Canada has reasonable access to financial capital through formal banking institutions. However, access to mining specific financial capital specialists does not exist in this region.

ADVANCED RESOURCES

Labour: Post-secondary education is heavily subsidized for Canadian residents. Canada has many mining-specific programs in post-secondary education and research institutions. However, those institutions are located prohibitively far from the Basin-Boundary region.

The Basin-Boundary region has consistently demonstrated post-secondary education levels roughly 10% below the provincial average. Matching skills with regional skilled-labour shortages has been a common problem in the Basin-Boundary Region.

Capital: The Basin-Boundary region does not have access to advanced capital resources. Bridge financing has been identified as a gap in the region’s economic infrastructure

PHYSICAL INFRASTRUCTURE

Canada has a reasonably well maintained public transportation infrastructure and rail system. However, transportation over a huge area is necessarily limited by resource constraints. Reliable access to air transportation is a common challenge in the western portion of the region.

ADMINISTRATIVE INFRASTRUCTURE

Canada’s federal, provincial and municipal governments all offer services to facilitate business development. By international standards, Canada does not hold a particular strength or a particular weakness in this respect.

INFORMATION INFRASTRUCTURE

Basic information infrastructure through the Basin-Boundary region is of high-quality. Broad-band, fibre-optic service is only available in some locations.

SCIENTIFIC / TECHNOLOGICAL INFRASTRUCTURE

Canada's scientific and technological infrastructure is very well developed. However, most of those benefits are not evident in the Basin-Boundary region because of its relative level of isolation. Top-tier research institutions are a full day's drive away.

REGIONAL DEMAND CONDITIONS

MARKET SIZE

Teck Cominco has a large presence in the towns of Trail and Sparwood. These two branches of Teck represent the sectoral anchor for the region.

Additional market information was not readily available at the time of writing⁶. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

MARKET SOPHISTICATION

Market information was not readily available at the time of writing⁷. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

One consideration, in this respect, is in the interpretation of the general public as consumers of the industry's by-product; namely, pollution and environmental degradation. A number of case studies (including the Australian case study) contain story lines demonstrating cluster members tackling perceived weaknesses in an innovative manner, and turning those facets of the business into an advantage.

Given the vocal, and relatively well educated position of much of the region's population with respect to pollution, cluster members should consider whether potential exists to turn this into a source of advantage.

REGIONAL RELATED & SUPPORTING INDUSTRIES

UPSTREAM

Market information was not readily available at the time of writing⁸. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

⁶ There is an opportunity to explore this question and to determine, in a more defensible way, the extent of the regional market. Public data is not readily available for a detailed analysis of this kind. It is recommended for interested parties to apply a Business Retention & Expansion survey to the sector to develop regional data.

⁷ Ibid 4

⁸ Ibid 4

DOWNSTREAM

Market information was not readily available at the time of writing⁹. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

REGIONAL CONTEXT FOR FIRM STRATEGY & RIVALRY

COMPETITIVE ENVIRONMENT

Market information was not readily available at the time of writing¹⁰. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

STRATEGIC CONTEXT

Market information was not readily available at the time of writing¹¹. A limited treatment of the various sectoral stakeholders and related stakeholders is included in Appendix A.

⁹ Ibid 4

¹⁰ Ibid 4

¹¹ Ibid 4

RECOMMENDATIONS

The Mining & Metals sector is the economic anchor in the areas immediately surrounding both Sparwood and Trail. The sector is a major employment driver for the region and has created a number of spin-off companies and support operations. As a focal point, this sector holds the potential to drive the region's economy.

The Lower Columbia Community Development Team Society (LCCDTS) Metallurgical Committee is poised to act as a quasi-industry association, lobby group, and sectoral promoter. The committee has defined its Vision Statement as:

Our region has a diverse community of innovative and prosperous SMEs in a metallurgical cluster supported by a comprehensive network of resources, infrastructure and highly qualified people.

The following are a suite of recommendations for the LCCDTS Metallurgical Committee and any other interested stakeholders.

1. Establish a Mining & Metals Sector network. Network goals could include: development of a regional trade association, communications and marketing strategies, facilitation of collaboration, sponsor further analysis of the sector's breadth of upstream and downstream related industries.
2. Inventory the "cluster". Perform a network analysis to determine the size and breadth of the Mining and Metallurgy Cluster. Include, in the questionnaire, a suite of questions designed to fill the data gaps on the region's Diamond Conditions.
 - a. Expand the concept of the "region" to include the entire Basin-Boundary
3. Perform a Value Chain Analysis and a Supply Chain Analysis to identify service and activity gaps that may be filled by regional stakeholders.
4. Explore education partnership between Selkirk/COTR and UBC and/or UofA and/or UofC. These partnerships should be pursued aggressively, but thoughtfully. As part of these efforts:
 - a. Build a comprehensive strategic plan to frame any education or skills development based efforts
 - i. Frame goals of efforts already underway
 - ii. Create long-term goals and vision
 - b. Foster existing efforts to bring senior students to the region
 - i. Prioritize by innovative potential
 - ii. Improve student retention
 - c. Continue working with regional colleges to establish focused curriculum goals
 - i. Consider sponsored / partnered certificate development
 - ii. Avenues with high potential for development of regional research capacity within colleges
5. Strengthen relationships between potential cluster members and local governments. The role of the local government is to remove barriers to the formation and development of the cluster. This is not limited to regulatory barriers, but includes the encouragement of

education and skill development specific to the growing cluster, and facilitation through infrastructure improvement. Cluster network members may consider an analysis of the regulatory regime as it pertains to the development of strong Diamond Conditions.

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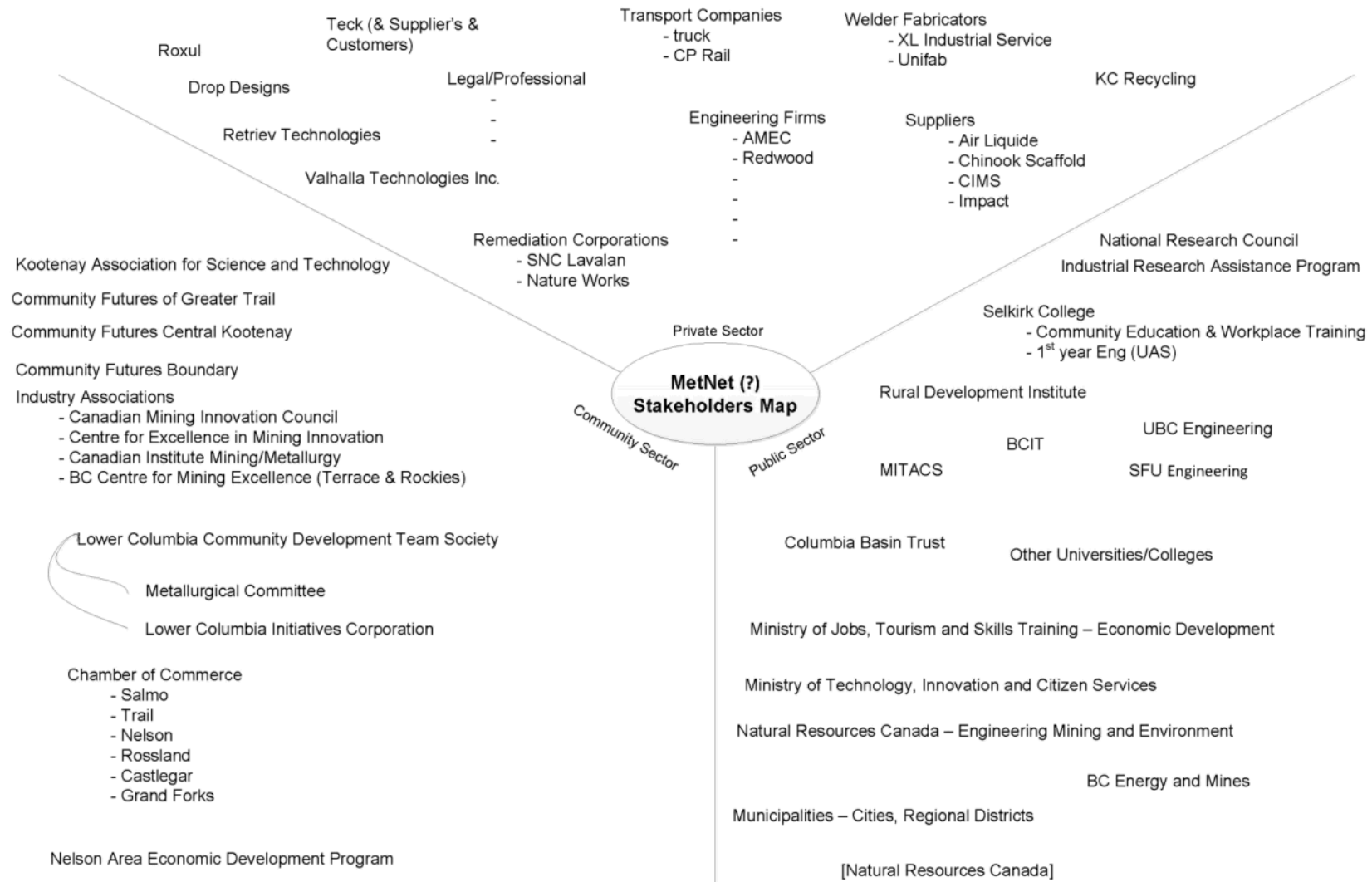
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APPENDIX A



SOCIETY ACT

CERTIFICATE OF INCORPORATION

I Hereby Certify that

**LOWER COLUMBIA COMMUNITY DEVELOPMENT TEAM
SOCIETY**

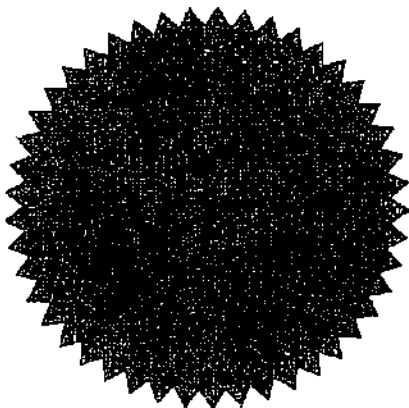
has this day been incorporated under the *Society Act*

Issued under my hand at Victoria, British Columbia

on December 11, 2009



**RON TOWNSHEND
Registrar of Companies
PROVINCE OF BRITISH COLUMBIA
CANADA**



From: [Rural Dividend FLNR:EX](#)
To: ["Terry Van Horn"](#)
Subject: RE: Rural Dividend Program – 5th Intake Application Follow Up – 2018070131 Lower Columbia Community Development Team Society (LCCDTS)
Date: September 11, 2018 9:18:00 AM

Good morning Terry,

Thank you. We can confirm receipt of your email and the information provided has been attached to the project file.

Best regards,

Rural Dividend Program Office
Tel: 250-356-7950

From: Terry Van Horn [mailto:tvanhorn@metaltechalley.com]
Sent: Monday, September 10, 2018 9:33 AM
To: Rural Dividend FLNR:EX
Subject: Re: Rural Dividend Program – 5th Intake Application Follow Up – 2018070131 Lower Columbia Community Development Team Society (LCCDTS)

Good Morning, yes the name of the applicant organization is Lower Columbia Community Development Team Society

On Mon, Sep 10, 2018 at 8:46 AM, Rural Dividend FLNR:EX <ruraldividend@gov.bc.ca> wrote:

Dear Applicant,

Thank you for your application to the BC Rural Dividend Program.

Upon the initial review of your application, it was noted that the following documents were not completed according to program guidelines:

- The organization name listed in the application, Lower Columbia Community Development Team Society (LCCDTS), does not appear to be the correct legal name of the organization
 - Please confirm that the name of the applicant organization is Lower Columbia Community Development Team Society.

We ask that you provide the Program with the required documents as listed above by the **deadline of September 21st 2018**, to ensure that your application will proceed to the review and assessment process.

Please note that no extensions will be provided. If the Program does not receive the required documents within the stated timeline, the application will be deemed ineligible.

If the freshet and wildfire situation this summer impacts your ability to provide the information requested in this email please contact the Program Office.

Should you have any questions or concerns, please do not hesitate to contact the Program Office at 250-356-7950 or reply to this email.

Best regards,

Rural Dividend Program Office
Tel. 250-356-7950

--

Terry Van Horn
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tvanhorn@metaltechalley.com
www.metaltechalley.com
250-364-6461 office
250-231-5041 cell

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From: [Wilkinson, Amanda FLNR:EX](#) on behalf of [Rural Dividend FLNR:EX](#)
To: ["Jacomien van Tonder"](#)
Subject: RE: Rural Dividend Program – 5th Intake Application Follow Up - 2018070131 Lower Columbia Community Development Team Society (LCCDTS)
Date: September 20, 2018 2:41:00 PM

Good afternoon Jacomien,

Thank you for your email. We have received all the required information and the project file is complete.

Best regards,

Rural Dividend Program Office

Tel: 250-356-7950

From: Jacomien van Tonder [mailto:admin@metaltechalley.com]

Sent: Thursday, September 20, 2018 1:51 PM

To: Rural Dividend FLNR:EX

Subject: Rural Dividend Program – 5th Intake Application Follow Up - 2018070131 Lower Columbia Community Development Team Society (LCCDTS)

We would like to confirm that you've received our answer to you re-mail dated September 10 and that no information is outstanding from our side.

Regards

Jacomien van Tonder

Project Coordinator

Metal Tech Alley

admin@metaltechalley.com

www.metaltechalley.com

250-364-6461 office



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----- Forwarded message -----

From: Rural Dividend FLNR:EX <ruraldividend@gov.bc.ca>

Date: Thu, Sep 20, 2018 at 1:14 PM

Subject: AUTOMATIC REMINDER - Rural Dividend Program – 5th Intake Application Follow Up - 2018070131 Lower Columbia Community Development Team Society (LCCDTS)

To: "tvanhorn@metaltechalley.com" <tvanhorn@metaltechalley.com>, "bvanbeek@shaw.ca" <bvanbeek@shaw.ca>

Dear Applicant,

****This is an automatic reminder. Please do not reply to this email.****

Thank you for your application to the BC Rural Dividend Program.

On September 10th you received an email identifying documents that were not completed according to program guidelines. **If you have already sent your required documents please disregard this message as your documents are being reviewed by the Program Office.**

This is a reminder that all required documents must be provided to the Program by the **deadline of September 21, 2018**, to ensure that your application will proceed to the review and assessment process.

Please note that if the Program does not receive a response from you by the stated timeline, the application will be deemed ineligible.

If the freshet and wildfire situation this summer impacts your ability to provide the information requested in this email please contact the Program Office.

Should you have any questions or concerns, please do not hesitate to contact the Program Office at 250-356-7950 or reply to this email.

Best regards,

Rural Dividend Program Office

Tel. 250-356-7950

--

Terry Van Horn

Executive Director

tvanhorn@metaltechalley.com

www.metaltechalley.com

250-364-6461 office

250-231-5041 cell



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From: [Terry Van Horn](#)
To: [Olson, Larry FLNR:EX](#)
Subject: Re: RDF
Date: February 21, 2019 10:47:46 AM

s.22

Happy with that for sure.

Sent from my iPhone

> On Feb 21, 2019, at 11:31 AM, Olson, Larry FLNR:EX <Larry.Olson@gov.bc.ca> wrote:

>

> New few weeks is what I am hearing. Sorry I can't tell you anymore. If I knew I would tell you. s.22

s.22

>

> -----Original Message-----

> From: Terry Van Horn [<mailto:tvanhorn@lcjc.ca>]

> Sent: Thursday, February 21, 2019 9:00 AM

> To: Olson, Larry FLNR:EX

> Subject: RDF

>

> Hey Larry, any updates. We r really starting to panic. Just need to know one way or another so we can plan our budgets and go out and look for other funding. Please see if you can find something out from the higher ups.

Thanks.

>

> Sent from my iPhone

From: [Rural Dividend FLNR:EX](#)
To: ["tvanhorn@metaltechalley.com"; "bvanbeek@shaw.ca"](#)
Cc: [Olson, Larry FLNR:EX](#)
Subject: Rural Dividend - Approval of Funding - 2018070131 Lower Columbia Community Development Team Society
Date: March 25, 2019 2:32:00 PM
Attachments: [2018070131 Notification of Approval.pdf](#)
[2018070131 Lower Columbia Community Development Team Grant Letter.pdf](#)
[BCID_V_cmyk_pos.jpg](#)
[BCID_graphic details.pdf](#)
[Schedule A Appendix 1A - Sample Interim Progress Report.pdf](#)
[Schedule A Appendix 1B - Sample Final Progress Report.pdf](#)

Good afternoon,

Please see the attached regarding your Project application to the BC Rural Dividend Program.

Thank you,

Rural Dividend Program Office
250-356-7950



Reference: Rural Dividend Program – Approval of Funding

March 22, 2019

Dear Terry Van Horn,

On behalf of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), I am pleased to advise you that a grant of \$500,000 has been awarded from the Rural Dividend Program to Lower Columbia Community Development Team Society for your project (MetalTechAlley 4.0-Sustainability and the Circular Economy).

Please find attached the Grant Agreement for your project. Please review the Grant Agreement in full. If any changes need to be made, please contact the Program Office at 250-356-7950 or ruraldividend@gov.bc.ca.

The Province will be making public announcements about the successful projects in the near future. We require that you keep confidential the confirmation of your funding until it is announced publically by the Province.

Please note that FLNRORD Regional Economic Operations staff are available to provide support for the successful implementation of your project. The Regional Manager for your area is Larry Olson and their contact information is 250.490.8261. Additionally, if you are completing a trail related project we ask that you engage with staff from the Recreation Sites and Trails BC (RSTBC) branch of FLNRORD. If you are not aware of the RSTBC staff for your region please contact the Program Office.

Please note that Grant funding provided by the Rural Dividend Program is project specific. Continued financial support for programs and/or staff positions created through this project should not be anticipated from the Program.

Direct Deposit will occur if you have previously received funding from the Province by direct deposit. Otherwise, the funding award will be administered by cheque.

We appreciate your application and wish you success in your efforts to strengthen your community's resiliency and economic viability. If you have any questions, please contact the Program Office at ruraldividend@gov.bc.ca or at 250-356-7950.

Congratulations, and I wish you every success with your project.

Sincerely,

Chris Stagg, Assistant Deputy Minister
Rural Development, Lands and Innovation Division
Ministry of Forests, Lands, Natural Resource Operations and Rural Development



Agreement #:2018070131

Terry Van Horn
Executive Director
Lower Columbia Community Development Team Society
1355 Pine Ave
Trail, British Columbia V1R 4E7

Dear Terry Van Horn:

The BC Rural Dividend Program (the "Program") assists rural communities to reinvigorate and diversify their local economies. Grants are awarded to support projects that contribute to community economic development, economic diversification, and capacity building.

Thank you for your request for funding as outlined in your submission dated July 31, 2018 (application submission date) (the "Proposal"), incorporated into this grant agreement (the "Agreement") as Appendix A – Proposal.

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development (the "Province", "we", "us", or "our" as applicable) is pleased to provide a grant in the amount of \$500,000 to the Lower Columbia Community Development Team Society (the "Recipient", "you", or "your" as applicable) to support the MetalTechAlley 4.0-Sustainability and the Circular Economy (the "Project") as outlined in the Proposal.

Under this grant agreement (the "Agreement") any funds that have not been expended by the agreement end date, or which cannot be committed to the achievement of the Project as outlined in Appendix A-Proposal:

- (a) Must be returned by the Recipient to the Province; or
- (b) May be retained by the Recipient as supplemental funding upon written confirmation from the Province; or
- (c) May be deducted by the Province from any future funding requests submitted by the Recipient and approved by the Province.

This Agreement starts upon March 22, 2019 and ends March 22, 2021. The Recipient will advise the Province immediately of any substantial events that could impact the Project end date as identified in Appendix A - Proposal.

Further to this, the Province requires reporting on the status of achievements in relation to this funding, and financial information, with timing and content of reporting as agreed between the Province and the Recipient. All reporting templates will be provided by the Province. The Recipient will submit an Interim Report on the 31st of May and the 30th of November of each year of the Project duration and a final project report upon project completion but prior to the agreement end date identified in this agreement and will include:

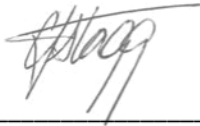
- (a) Confirmation that the Financial Contribution was spent according to the Project defined in Appendix A –Proposal; and
- (b) A description of project deliverables, successes, lessons learned, and outcomes achieved.

Additionally, The Province reserves the right to undertake site visits and/or conduct audits, as identified in Appendix B, Section 4 – Monitoring and Audit.

Furthermore, it is the Recipient's responsibility to ensure that Rural Dividend Funds are not used for ineligible costs. The budget included in Appendix A - Proposal is subject to, but not limited to, the examples of ineligible costs listed in this grant agreement (the "Agreement") identified in Appendix B, Section 3 – Ineligible Costs.

We wish you success in achieving the objectives of this Agreement. Please contact the Program Office at 250-356-7950 if you have any questions or concerns.

Yours truly,



Chris Stagg
Assistant Deputy Minister
Ministry of Forests, Lands, Natural Resource
Operations and Rural Development

March 22, 2019

Date

APPENDIX A – PROPOSAL



Request for support

Reference #: 2018070131

Submitted: Jul 31, 2018

Status: Pending

Contact information

Organization	Lower Columbia Community Development Team Society (LCCDTS)	Primary contact	Terry Van Horn
		Title	Executive Director
Address	1355 Pine Ave Trail, BC, CA V1R 4E7	Phone	250-364-6461
		Mobile	s.22
B/N	S-0056029	Email	tvanhorn@metaltechalley.com
		Signatory Authority	Bill Van Beek
		Title	President
		Phone	250-364-6461
		Mobile	s.22
		Email	bvanbeek@shaw.ca

Organizational profile

Type of organization	Not-for-profit Organization			
Project partners associated	Partner name	Contact name	Phone	Email address
	Fenix Advanced Materials	Don Freschi	250-512-9378	don@fenixam.com
	Teck Metals	Thompson Hickey	250-364-4515	thompson.hickey@teck.com
	KAST	Don Freschi	250-362-5052	info@kast.com
	i4C Innovation Centre	Pilar Portela	s.22	pilar.portela@i4c.tech
	Selkirk College	Terri McDonald	250-365-1434	tmacdonald@selkirk.ca
Destination trails project	No			

Request details

Request type	Partnerships Project (up to \$500,000)
Kind of support	Financial support
Total amount requested	C\$500,000
Total project budget	C\$838,890

Project details

Name of project	MetalTechAlley 4.0-Sustainability and the Circular Economy
Location impacted	Canada - Kootenay - Kootenay Boundary - 1355 Pine Ave.-LCCDTS office
Focus of initiative	Business sector development
Description	<p>With the private and public sectors working together "MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a regional project that will further drive innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies, IIoT & Big Data and Industrial recycling. This project will also support the creation of a sustainability funding model to ensure continued success for the metaltechalley initiative and will include strategies for continued buy-in from our municipal and business leaders.</p> <p>Activities include:</p> <p>Supply Chain Inventory and Gap Analysis:</p> <ul style="list-style-type: none"> • Hire a consultant to inventory our supply chain and by products, identify local opportunities and recommend strategies to improve competitiveness. • Work with partners to research, innovate and create new opportunities to commercialize identified by-products. <p>Building a Circular Economy:</p> <ul style="list-style-type: none"> • Host a circular economy workshop to promote the benefits of building a circular economy and what their role is in ensuring success. • Travel and relationship build with regions who have successfully created a circular economy to understand and learn best practices. • Hire a part time Training Program Director to create, manage and deliver training programs. • Support two research by-product scientists. • Host Jobs of Tomorrow career awareness event • Host an Industry 4.0 School & Industry Night • Attend conferences and regions to market by-product development opportunities and attract researchers and entrepreneurs to further develop by products and create new markets. <p>Marketing and Promotion:</p> <ul style="list-style-type: none"> • Hire a part time Marketing coordinator who will continue to build relationships with Municipal, Provincial and Federal trade officials to further expand our outreach and continue to generate excitement and interest in the region. Promote metaltechalley through various platforms. • Attend targeted conferences and events with speaking engagement opportunities to address larger audiences and continue to broaden our outreach and share the metaltechalley story. • Host a MetalTechAlley Conference. <p>Sustainability of MetalTechAlley:</p> <ul style="list-style-type: none"> • Hire a consultant to review other cluster approaches and recommend solutions that will ensure metaltechalley continues to grow and expand the economy.
Beneficiaries	<p>Trail-7709</p> <p>Rossland-3729</p> <p>Fruitvale-1920</p> <p>Montrose-996</p> <p>Warfield-1680</p> <p>RDKB Area A-1891</p> <p>RDKB Area B-1442</p>

Outcomes & Indicators #1

Outcome Creation of a Sustainability Funding Model that will create a value proposition for the local businesses and elected officials.

Indicators of success \$100,000 of local funding is collected to advance the metaltechalley strategy.

Outcomes & Indicators #2

Outcome Digitally technology trained local youth and engagement and excitement about the career opportunities in digital technologies.

Indicators of success 800 youth participating in workshops and/or training and 5 local youth are hired by local companies.

Outcomes & Indicators #3

Outcome By-products are researched and commercialized.

Indicators of success 2 new companies created from the research and commercialization efforts.

Outcomes & Indicators #4

Outcome Increased interest of the region's opportunities through robust marketing strategies and hosting MTA conference.

Indicators of success 5 new companies attracted to the region and 15 new skilled workforce are attracted to the region.

Outcomes & Indicators #5

Outcome Supply chain inventoried and gaps analyzed.

Indicators of success 3 new business connections are made resulting in reduction of local businesses expenses. 1 new market is found for a local company.

Outcomes & Indicators #6

Outcome Creation of Circular Economy Strategy

Indicators of success 75% buy in from the local businesses.

Outcomes & Indicators #7

Outcome Training programs created for local workforce.

Indicators of success 10 companies participate in the training to diversify or increase skills of employees resulting in productivity increase.

Community Need Addressed

This REGIONAL project supports the communities of Rossland, Warfield, Trail, Montrose, Fruitvale and RDKB Areas A&B which are heavily dependent on a single sector employer, Teck Metals, who employs either directly or indirectly over 35% of our local workforce. The LCIC has undertaken significant work in the past 5 years, through Business Retention and Expansion (BRE) efforts, a Foreign Direct Investment Strategy (FDI), and the creation of a the new MetalTechAlley marketing strategy, to find solutions to alleviate the constant cyclical nature of a resourced based economy.

Recognizing diversification is essential for continued economic growth for communities in a single sector market the MetalTechAlley 4.0 – Sustainability in a Circular Economy project will continue to drive sustainable economic development in the metals and technology sectors. By continuing to strengthen and expand our expertise in advanced materials and emerging technological expertise this project will strengthen and diversify the local economy and will facilitate the generation of new jobs and new opportunities for workers and their families. It will provide access to new and expanding markets and resources and ensure the region's ability to compete in these new markets. Our residents benefit when our economy is healthy, strong and diverse, building confidence in our businesses, our residents and potential investors considering investing in our community. Building on the success of the previous metaltechalley initiative more work is needed to

ensure:

- continued outreach to the markets that best fit within our cluster.
- the best utilization of our products and services.
- continued exploration and innovation for our by-products.
- our local workforce has the training and skills to lead innovation.
- youth are trained on digital technologies to ensure they are obtaining practical skills to prepare them for employment in a digital world and match the needs of the local workforce.
- sustainability of the metaltechalley program.

Community Strength Increased

This REGIONAL project includes strategies that focus on global competitiveness, sustainability and competitiveness by positioning the region as a leader in the circular economy and focuses on enabling our businesses and their value chains to transition towards a more viable, sustainable and competitive economic model through market research and competitive analysis, continued engagement, education and training. The goal is for our supplies, services and opportunities to be top of mind for target sector companies looking to expand, skilled labor looking for a career, entrepreneurs looking for opportunities and trade officials to promote our region as a global leader in the metals and technology sector. Gaining exposure for the region and these sectors will build global business-to-business connections resulting in transfer of technology, opportunities, referrals, stronger partnerships and/or requests for services, ultimately improving regional unemployment statistics, contributing to corporate tax revenues and attracting investors. It will promote our openness for new business development, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy, ultimately ensuring workforce retention. Based on past engagement results the majority of the local business cited lack of skilled workforce as their biggest barrier to expansion and growth. Support of this program will allow us to go out on a wider scale to market our opportunities to attract the skilled workforce needed to ensure our businesses continue to grow and expand as well as locally develop educational and training programs with Selkirk College and MIDAS that align with our businesses needs, ensuring our local businesses stay healthy and have the ability to access new markets and increase their competitiveness. Supply of raw materials is limited and can be costly but if we can move towards a more circular economy by having an inventoried list of our supply chain, products, and services and with by-product development we can remove pressure on environment, improve the security of the supply of raw materials, increase competitiveness, stimulate innovation and we will boost economic growth and create more jobs locally. Creating a sustainability plan for the metaltechalley strategy that works for our businesses and our economy we will ensure this cluster approach continues to thrive long after funding from RDF.

Project supports innovation

Innovation is not just about creating new ideas; it is about finishing things we start, having the patience and commitment to help innovations go to scale, not just seeding the development of new things. This proposal takes the learnings and momentum we have underway with the MetalTechAlley initiative and move it towards the next steps in driving innovation in our region through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial recycling. Strengthening regional business to business connections and collaboration, showcasing the breadth and depth of our business capabilities and our regions' collaborative efforts to regional and external markets will ensure continued growth and sustainability.

Project creates shared

Since the inception of metaltechalley we have attracted many diverse companies and

prosperity	<p>skilled workforce from foreign countries and have created an on-boarding program to support these entrepreneurs, businesses and employees from all walks of life, making the settlement process smooth and swift. With this support we will to continue to build our resources to ensure this process continues to support all our residents. This approach ensures diversification in gender and ethnicity, educational backgrounds, experience and family statuses enhancing economic growth both at the business and community levels. The project ensures access to all community assets and will ensure shared prosperity by focusing on advancing knowledge of existing work force, promoting investment from local and external businesses and attracting talent from all community areas, from youth to First Nations. By promoting social mobility through education and focusing on training the existing workforce, we are well positioned to decrease economic inequality in our region. Respecting rights and doing good business is as applicable to First Nations as it is to non-First Nations communities. We pride ourselves in the inclusive and regional approach we have taken locally, regionally and externally, with NGOs and the private sector in engaging all our residents to be inclusive. LCIC and LCCDTS are not only open to creating business partnerships and opportunities with First Nations and our communities that are mutually beneficial, it will also encourage innovation through early engagement and a willingness to adapt program offerings that will result in inclusive participation throughout the region, the province and the country. You will notice that as part of the LCIC 's work plan, creating a culture of inclusiveness is one of our key priorities.</p>
Project creates jobs	Yes
Direct fulltime jobs	3
Direct part-time jobs	3
Direct temporary jobs	
Project create employment	<p>Project Coordinator-full time-30 hours a week from Jan 1, 2019-Sept 30, 2020-will run, monitor administer and organise all project activities in cooperation with and under the direction of the LCIC EDO, aiming at the effective execution of the project. This is a temporary permanent position .</p> <p>Researchers-2x-full time-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)- will work with partners to create viable, value add products from by products and create business cases for commercialization.</p> <p>Marketing coordinator-part time-15 hours per week for 104 weeks-create and administer marketing and promotion campaigns through various platforms including social media campaigns, video campaigns, billboard campaign, various print articles and targeted email in-box outreach.</p> <p>Training Program Director-part time-15 hours a week for 104 weeks-to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.</p> <p>Technology Services Coordinator-part time- 8 hours per week for 104 weeks- work with our partners KAST, i4C and MIDAS to support and commercialize new business development to reach new and expanding markets and resources, support the settlement of new arrivals to the region and create strong relationships among service providers.</p>
Economic opportunities for youth	<p>Yes - The ability to retain youth depends greatly on offering jobs that are enticing, sustainable and offer growth opportunities. Quality jobs are at the heart of the resiliency and strength in the community. Transitioning young people from schools and training institutions into the labour market to become a skilled workforce will be achieved by building solid bridges between the world of work and the training programs that this project</p>

is focused on.

By hiring a part time Training Program Director to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.

We will also host an Industry 4.0 School and Industry Night in partnership with UBC-O, Selkirk College and I4C Innovation Centre to foster relationships between the business community and the youth to have a better understanding of the needs of the business community.

Host Jobs of Tomorrow career awareness event for K-12 students at Selkirk college and MIDAS Lab

to generate excitement of digital technologies and the potential for job diversity.

**Potential indirect employment
created**

It is well documented that the variation in indirect job creation multipliers reflect sectoral and regional variations, labor intensity of operations and local labor regulations. Where the metallurgical industry in general has a 6X multiplier, technology is 25X +. Based on regional variations, labor intensity and regulations, we envision a 10X multiplier.

MetalTechAlley 4.0-Sustainability and the Circular Economy includes programs that facilitate job creation through engagement of investor members with private sector clients by targeting investor companies to move, partially or completely, to the region to take advantage of the opportunities bringing at a minimum 1 person per company and more likely a small core team or 3 to 5. Expecting 5 new companies with a minimum of 3 employees over two years we anticipate 150 new jobs in the region. Implementing the next wave of productivity in the metal and IIoT sectors will require these companies to, in turn, expand and hire local staff and use local services again expanding local companies.

**Current community development
plan**

Yes - LCCDTS Strategies:

STRATEGY 2

Increase workforce growth, development and renewal by generating rewarding employment opportunities, by attracting and retaining talent, and by providing accessible education and skill development.

STRATEGY 3

Enhance business growth and development through innovative, regional investment strategies, and by leveraging and showcasing our unique natural and environmental assets.

LCIC Priorities:

Priority 1: Business Development and Investment Attraction

Strategies:

- Leverage Strategic Partnerships
- Promote Assets and Advantages
- Increase Awareness of Region
- Facilitate and Support Local Business needs

Priority 2: Growing and Marketing the MetalTechAlley Platform

Strategies:

- Develop a Circular Economy Mapping strategy to identify gaps and opportunities.
- Target new business or expansion opportunities with existing businesses (raw material by-products and industrial recycling).
- Grow and promote our industrial supply chain.
- Investigate renewable energy project opportunities around blockchain and Industry 4.0

technologies.

Priority 3: Organizational Priorities & Structure Development

Strategies:

- Investigate new funding partners and programs
- Explore sustainability "pay to play" approach

Priority 4: Advancing Progress-Leadership and Culture

Strategies:

- Continued engagement with local leaders
- Establish a welcome and onboarding team
- Establish a campaign to create a culture of openness and inclusion
- Create and promote a culture of technology adoption and pioneering new technologies

Existing community support

Support for moving metaltechalley forward to sustain and diversify our economy has been demonstrated from our regional service providers and the private sector with the increase of financial and in-kind support from most of the partners in this application validating what we are doing is working and our partners see value in the strategy.

By creating a strategically targeted marketing plan that leverages local organizations and enterprises in the metals and technology sectors we have created partnerships with other non metals related organizations to create a similar strategy for their specific needs. Since the creation of the metaltechalley strategy our core funding has been secured for 3 more years and is a direct result of the metaltechalley success.

As well as endorsement and support letters from the Cities of Trail and Rossland, and our local Community Futures Office, contributions from the following organizations and private sector companies range from cash to in-kind support:

KAST (Kootenay Association for Science and Technology), with their team of EiRs (Entrepreneurs in Residence) and local technological experts who provide mentoring services for business growth and stability as well as the MIDAS facility which will continue to provide access to equipment and startups and access to training programs.

Selkirk College will provide ongoing research and analysis related to the project to help build capacity for informed decision making.

Teck Trail Operations: metals industry leader who will provide expert knowledge and cash to support workforce attraction efforts and access to by-products for research and development expertise.

Fenix Advanced Material: will provide cash as well as in-kind support to access equipment, mentoring and expertise in metals.

i4C: will provide cash and in-kind support for entrepreneurs providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting products to market.

Contribution from other	C\$338,889
In-kind contribution from others	C\$83,889
Other organizations providing fund	No
Project start date	Oct 01, 2018
Project end date	Oct 31, 2020
Project duration	24
Project ready to commence	Yes
Key milestones	Project Coordinator hired-Jan 2019 Training Program Director hired-Nov 2018

Marketing Coordinator Hired-Jan 2019
 Technology Services Coordinator hired- Nov 2018
 By product research started by Dec 31, 2028
 Sustainability Funding Model completed – Oct 31, 2020
 Supply chain Inventory and recommendation-Dec, 2019
 Circular Economy Plan-Oct 31, 2020
 180 Digital Technologies Training Workshops completed-Oct 31, 2020
 National Industrial Symbiosis Program Workshop for a Circular Economy-Dec 31, 2018
 Industry 4.0 School and Industry Night-Dec 31, 2019
 10 Stakeholder meetings for buy in and Sustainability-Oct 31, 2020
 MetalTechAlley Conference – Spring 2020
 Europe- research supply chain and Circular economy expertise- fall 2020
 Sudbury- research metallurgical cluster- Partnerships-Winter 2018
 Vancouver-meet with gov officials, global affairs and International Trade officials-
 partnerships 4x--Sept 30, 2020
 Waterloo- research expertise in advanced materials and by-product development-
 Partnerships -Summer 2020
 CIM-2ppl-materials science and technology conference-Winter 2019
 BC Tech Summit -Spring 2019
 Trade Mission to USA - 2ppl -Summer 2019

Creation of 3x digital By-Product Story Maps-Mar 2019
 MTA Webpage upgrades-interactive functions and intuitive applications-Dec 31, 2019
 social media campaigns, video creation, photo bank, billboard campaign, various print
 articles - Sept 30, 2020

Project ongoing Yes

Project continuation A large portion of this application focuses on exploring and learning best practices of a sustainable cluster program and will take these learnings and create a metaltechalley sustainability funding model that will include strategies for continued buy in tailored to our region's businesses, organization's and elected leaders to ensure continued success for the metaltechalley initiative.

As awareness of the metaltechalley initiative continues to expand, our neighboring communities are inquiring how to partner with us on the initiative; as we continue to move forward and get buy in from surrounding communities our capacity will increase and our outreach will continue to grow and expand resulting in economic prosperity for all our communities.

Project management skill There has been incredible interest of the metaltechalley project using a regional cluster approach to drive economic development in a rural community including; 9 Ministry and staff visiting the region, 3 Provincial projects partnerships and 5 speaking engagements in partnership with the Province to promote metaltechalley and the strategy. We have demonstrated and proven we are a results oriented regionally focused organization with support of the private sector and excellent partnerships locally, provincially, nationally and internationally. With the expertise of the LCCDTS/ LCIC staff and board, which consist of over 50 professionals in the region working collaboratively on economic development; these organizations are well situated to support and administer this project.

Terry Van Horn, the Economic Development Officer, lead for the project. Under her leadership the LCIC has been recognized as a leader in economic development activities throughout the Province and in the last four years has won two BCEDA provincial awards and one BCEDA honorable mention award (first time ever awarded) for various Marketing Initiatives that have been undertaken through the LCIC office with limited resources and funding. The LCIC Thriving Metrics dashboard is recognized as an Economic

Development best practice and is featured in the new Provincial Economic Development Metrics Toolkit.

The LCIC has implemented several successful similar projects including a Foreign Direct Investment Strategy which identified expanding the metals and technology sectors as areas of opportunities for the region to grow and diversify. In her seven years as EDO, Terry has leveraged her core funding with funding from private companies, Provincial agencies (RDF, SIDIT, LMP), Federal agencies (ICCI), Columbia Basin Trust, and various other organizations to over \$1.5M. Proving the LCIC is a trusted organization that gets things done collaboratively, on time, within budget and in a professional manner.

Role of project partner

"MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a fundamental link between the resource based local industries and the Industry 4.0 gaps for the commercialization of related products that will be developed by existing community businesses, entrepreneurs and investor businesses interested in relocating to the region and uses project partnerships and resources to fill the gaps. At the centre of metaltechalley is LCIC and LCCDTS in partnership with our local communities regional district and Columbia Basin Trust who have provided the confidence and leadership in championing the project and have committed \$85,000 in cash to use a leverage and buy in.

To ensure our long term goals are met, we have partnered with private sector companies like Teck Metals, the world's largest integrated lead zinc smelter located in Trail BC; Fenix Advanced Materials a successful by-product purification company; who will provide access to expertise, research and testing facilities as well as by-products for further innovation and development; I4C Innovation Centre, the next step in business development, who will support these new entrepreneurs in providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting their products to market. We have also secured partnerships with MIDAS, a metallurgical industrial research and development centre that offers start ups a digital fab lab for rapid prototyping and assistance in business development, as well as access to expertise, equipment and research facilities; KAST for expertise in business development, brokering partnerships, skills attraction, mentoring, commercialization and referrals; Selkirk College and UBCO for brokering partnerships, access to funding streams, data collection, research, innovation, expertise and equipment in development of by products.

Project risks

Based on the previous RDF application, the LCCDTS/LCIC has proven to be a responsible funding recipient with fiscal accountability, reporting culpability with project successes that have exceeded expectations.

Moving towards a circular economy, as with any new way of doing business, may cause some apprehension and friction and be perceived as a threat by some stakeholders, but with good communication and informed decision making that and focusing on the greater benefits like environmental, social and economic impacts will ensure buy in from our residents, businesses, and communities. Finding the right person/s who want to research and be an entrepreneurs will require a very targeted approach. Expanding our reach and continued sharing of our story to a broader audience will continue to help stimulate interest and curiosity and drive growth and prosperity for all our communities. Access to relevant, up to date resources and services to support these new entrepreneurs and employees will be essential to project success ensuring all our partners are educated on the services and resources available will help share the load in ensuring the settlement process for new residents to the region are best supported. Understanding relationship building and brokering products and services take time and resources through this project funding we will continue to broaden our reach, educate our economic leaders and build strong relationships and implement processes that will ensure continued success of metaltechalley.

Creating a sustainability plan that works for all our partners will be a challenge but with continued engagement and education we will find a value proposition that ensures

financial stability for metaltechalley. To ensure goals and deliverables are met a robust monitoring process, as per the previous application, will be implemented and adjusted throughout the progress of the project.

Project include physical infrastructure	No
Destination trails permits/jurisdiction	N/A
Resolution	Motion: To support an application to the BC Rural Dividend Fund for "Metal Tech Alley 4.0 – Sustainability in a Circular Economy ".
Resolution moved by	Don Nutini
Resolution seconded by	Audry Durham
Resolution date	Jul 19, 2018

Instructions

1 Please fill in all fields marked with a red asterisk (*).

2 Use the "Tab" key to move from field to field in order, or the mouse to select any available (white-filled) field.

3 To paste copied information into a cell, you must double-click in the cell before pasting.
Note: do NOT use "Cut" (or Control-X) to remove information from a cell as this may make the application form unreadable.
Use the Delete key to remove information; use "Copy" (or Control-C) to copy information for pasting in another location.
Note: Mac users - do NOT use Numbers as the form will not function properly.

4 Some boxes have drop-down lists where you can select a value; for these boxes, click on the arrow that appears when your cursor is in the box, and select from the list.

5 Please attach completed Project Budget to your Application submission through the Rural Dividend website.

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

1. Project Information

Applicant Name (maximum 250 characters)

Lower Columbia Community Development Team Society (LCCDTS)

e.g. Timberlake Chamber of Commerce

Project Name (maximum 250 characters)

Metal Tech Alley 4.0 - Sustainability in Circular Economy

e.g., Timberlake Farmers' Market Stalls

Funding Stream (select from drop-down list):

Partnerships Project

Using the Program Guide definitions, select a funding stream from the list

Is this a Destination Trail Project?

☐es

2. Project Costs

Provide a detailed breakdown of costs related to project implementation. Totals will be auto-calculated and used in later calculations.

Category	Description of Cost (REQUIRED) (maximum 250 characters)	Costs	Funding
<div>Salary and Wages</div> <div>Provide the following information in the description of cost:</div> <div><div>• job title</div><div>• wage rate</div><div>• number of hours or months of employment</div><div>• if position is existing or is for a new hire</div></div>			

	Project Coordinator (\$60,000 per year)-30 hours per week for 91 weeks-New Hire	\$ 103,350	Rural Dividend
	By-Product Research Scientists (2x)-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)-New Hire	\$ 70,000	Rural Dividend
	Training Program Director - (\$25,000 per year)- \$24/hr for 15 hours a week for 104 weeks-New Hire	\$ 50,000	Other
	Marketing Coordinator - (\$25,000 per year)-\$24/hr at 15 hours per week for 104 weeks-New Hire	\$ 50,000	Rural Dividend
	Technology Services Coordinator- (\$10,000 per year) - \$24/hr for 8 hours per week for 104 weeks-New Hire	\$ 20,000	Other
	Sub-total	\$ 293,350	
Consulting and Professional Fees Provide the following information in the description of cost: • description of the service • name of the consultant / professional providing the service (if known) • length of the contract (may be an estimate)			

	Sustainability Funding Model Consultant-4 month	\$ 40,000	Rural Dividend
	Circular Economy Consultant- 5 month	\$ 50,000	Rural Dividend
	KAST-mentors, expertise, program support-ongoing	\$ 6,200	In-Kind
	Selkirk College-expertise and data research,program support-ongoing	\$ 4,600	In-Kind
	Tech-product development expertise-ongoing	\$ 9,590	In-Kind
	i4C-IIoT commercialization support-ongoing	\$ 5,000	In-Kind
	Lab testing and analysis from outside services-as needed	\$ 10,000	Other
	LCCDTS metallurgical committee expertise-on going	\$ 10,000	In-Kind
	Supply Chain Mapping research- 4 month	\$ 40,000	Rural Dividend
	Sub-total	\$ 175,390	
Travel and Meetings Meals and project travel related expenses must be based on government per diem rates. Provide the following information in the description of cost: • type of travel (air, car, etc.) • destination • number of nights • number of people			

	Europe-2ppl - research supply chain and Circular economy expertise-Partnerships (flights, 7 nights hotel, transportation, meals, etc.)	\$ 12,000	Other
	Sudbury-2 ppl- research metallurgical cluster- Partnerships (flight, 5 nights hotel, per diem, car rental)	\$ 5,000	Other
	Vancouver- 1 ppl-meet with gov officials, global affairs and International Trade officials-partnerships-4x (flight, 2 nights hotel, meals, etc.)	\$ 6,000	Rural Dividend
	Waterloo- 2 ppl-research expertise in advanced materials and by-product development-Partnerships (flight, 5 nights hotel, meals, etc.)	\$ 5,000	Other
	CIM-2ppl-materials science and technology conference-(flight, 6 nights hotel, per diem)	\$ 9,500	Other
	BC Tech Summit - 2 ppl x (flight, 3 nights hotel,per diem)	\$ 4,000	Other
	Trade Mission to USA - 2ppl (flight, 3 nights, hotel, per diem)	\$ 7,000	Rural Dividend
	Sub-total	\$ 48,500	
Training Provide the following information in the description of cost: • name/type of course/training • duration of the course/training • number of participants cost is based on • description of related expenses that may be included (ex. room rental, materials & supplies, registration fees)			

(online, brochures, etc.) • if hard copy, how many copies are made (may be an estimate) • if an event, include a description of any related expenses (room rental, refreshments, etc.)			
	Sub-total	\$	195,150

Equipment, Capital and Supplies Provide the following information in the description cost: • description of the item(s) • quantity of item(s), if applicable • description of any wages associated with the item(s) (ex. set-up & installation).	2 workstations for 2 new positions (computers/keyboards/screens/software/desks)	\$	10,000	Rural Dividend
	Research Equipment-pullers/chemicals/glasswear	\$	40,000	Other
	i4C-use of facility equipment and expertise	\$	5,000	In-Kind
	MIDAS facility -use equipment and expertise	\$	12,500	In-Kind
	Fenix Advanced Materials-use of equipment and expertise	\$	12,000	In-Kind
	Sub-total	\$	79,500	

Infrastructure Related Costs Provide the following information in the description of cost: • breakdown of all activities (ex. plumbing, electrical work, etc.) • description of all materials required • description of all wages and/or contractor costs including duration worked & number of employees			
	Sub-total	\$	-

Other Costs Any costs that do not fit under other categories (ex. space or room rentals).			
	Sub-total	\$	-

Total Project Cost		\$	838,890
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3. Project Funding				
Section 3A: Rural Dividend Funding Request				
		Amount \$	% of Total Cost	
Rural Dividend Funding Request	Auto-Calculated from Section 2. Project Costs	\$ 500,000	59.6%	
Section 3B: Applicant Contribution (Required for Single Applicant & Partnerships)				
	Description (REQUIRED) List all source(s) for applicant contribution (ex. reserve funds, partner name, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Applicant Financial Contribution	LCIC/LCCDTS/CBT/City of Trail and Rossland/Villages of Fruitvale, Montrose, Warfield and RDKB Area A&	Yes	\$ 85,000	10.1%
	Teck	Yes	\$ 50,000	6.0%
	Fenix	Yes	\$ 50,000	6.0%
	KAST	Yes	50000	6.0%
	I4C	Yes	\$ 20,000	2.4%
In-Kind Portion of Contribution	Auto-Calculated from Section 2. Project Costs	\$ 83,889	10.0%	
	Sub-total	\$ 338,889	40.4%	
Section 3C: Project Funding (List the remaining source(s) of all contributions to demonstrate how the project will be funded)				
	Additional In-Kind Contributions The remaining amount of in-kind contributions that cannot be applied towards the applicant contribution	Amount \$	% of Total Cost	
In-Kind Contribution	Auto-Calculated from Section 2. Project Costs	\$ 1	0.0%	
	Sub-total	\$ 1	0.0%	
	Description (REQUIRED) Provide the level of government, name of program, etc. (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Government Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
	Description (REQUIRED) List the source(s) of remaining other funds (ex. bank loan, industry, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
Section 3D: Totals				

Sub-total Funding (Sections 3B & 3C)		\$	338,890
Total Project Funding		\$	838,890

4. Summary of Project Costs and Project Funding		
Project Costs	Amount \$	% of Total Cost
Salary and Wages	\$ 293,350	35.0%
Consulting and Profesional Fees	\$ 175,390	20.9%
Travel and Meetings	\$ 48,500	5.8%
Training	\$ 47,000	5.6%
Marketing and Promotion	\$ 195,150	23.3%
Equipment, Capital, and Supplies	\$ 79,500	9.5%
Infrastructure	\$ -	0.0%
Other Costs	\$ -	0.0%
	\$ 838,890	100.0%
Project Funding	Amount \$	% of Total Cost
Rural Dividend Funding	\$ 500,000	59.6%
Applicant Contribution	\$ 338,889	40.4%
Additional In-Kind Contribution	\$ 1	0.0%
Other Government Funding	\$ -	0.0%
Other Funding	\$ -	0.0%
	\$ 838,890	100.0%

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

End of Form - press "Tab" key to return to the beginning

APPENDIX B – PROJECT DETAILS

1. DELIVERABLES

Project Component	Deliverables
Supply Chain and Inventory Gap Analysis	<ul style="list-style-type: none"> • Complete an analysis that inventories the supply chain and by products, identifies local opportunities, and recommends strategies to improve competitiveness. • Create new opportunities to commercialize identified by-products by working with partners.
Circular Economy Mapping Strategy	Develop a circular economy mapping strategy to identify gaps and opportunities
Marketing and Promotion	<ul style="list-style-type: none"> • Hire a Marketing Coordinator to continue to build relationships, promote Metal TechAlley through various platforms, and continue outreach and generate interest in the region. • Develop social media campaigns, video campaigns, billboard campaign, various print articles and communications outreach. • Host a MetalTechAlley conference
Sustainability Funding Model	Complete a sustainability funding model that will include strategies for continued buy-in tailored to the region's businesses, organization's and elected leaders to continued success.

2. PROJECT COSTS & PROJECT FUNDING

For Project costs and project funding, refer to the budget in Appendix A – Proposal. Rural Dividend Funds can be used towards eligible project costs incurred upon submission of application to the Program during the intake. All costs incurred prior to submission of application are ineligible for Rural Dividend funding.

Examples of ineligible costs are listed in this Appendix B, Section 3 Ineligible Costs. It is the Recipient's responsibility to ensure that Rural Dividend Funds are not used for ineligible costs.

3. INELIGIBLE COSTS

The Recipient is responsible for any charges stated in the budget referenced in Appendix A – Proposal that are ineligible including, but not limited to, the examples of ineligible costs listed below.

For inquiries or additional information pertaining to ineligible costs, refer to the Program Guide, available on the website at www.gov.bc.ca/ruraldividend or contact the Program Office.

EXAMPLES OF INELIGIBLE COSTS (including but not limited to the below):

Project Implementation:

- General organizational support costs.
- Any costs associated with administering the project, such as preparing progress reports.
- Costs being claimed under any other programs.
- Costs incurred outside the time periods for the project as outlined in application.
- Costs incurred before the application was submitted.
- Project contingency costs.

Infrastructure:

- Infrastructure related costs that exceed 25% of the total project cost.¹
- Infrastructure that is not tied to a broader project and outcome.
- Traditional municipal infrastructure (water/sewer/road/sidewalk) projects.

Project Management:

- Permits and approvals.
- Legal costs.
- Project-related professional fees payable to the Recipient.

Wages:

- Ongoing costs for existing staff salaries and benefits.

Capital:

- Capital purchases over 25% of total project costs.²
- Capital purchases that are not essential to the implementation of the project.
- Land acquisition.

Marketing/Travel:

- International travel³
- Directly lobbying of any level of government.
- Expenses related to attending conferences and trade shows.

¹ Infrastructure cost limits of 25% are not applicable to Destination Trail projects.

² Capital purchase cost limits of 25% are not applicable to Destination Trail projects.

³ International travel may be approved by the Province subject to a review of the costs by the Province. A review of costs associated with international travel must be requested by the Recipient.

Coordinating/hosting conferences/events.
Remuneration and travel of elected officials

Other:

Academic research that does not deliver concrete actions or tangible benefits.
GST and PST.
Financing costs and interest charges.
Alcohol

4. MONITORING AND AUDIT

The Province reserves the right to, for monitoring and audit purposes, at all reasonable times, on reasonable notice, enter any premises used by the Recipient to deliver the Services or request and keep any documents or records pertaining to the Services, in order for the Province to inspect, audit, examine, review and copy, whether complete or not, that are produced, received or otherwise acquired by the Recipient as a result of this Agreement.

It is the responsibility of the Recipient to ensure cooperation from all partners and third party contributors, in a timely manner, during a review or audit of the Services.

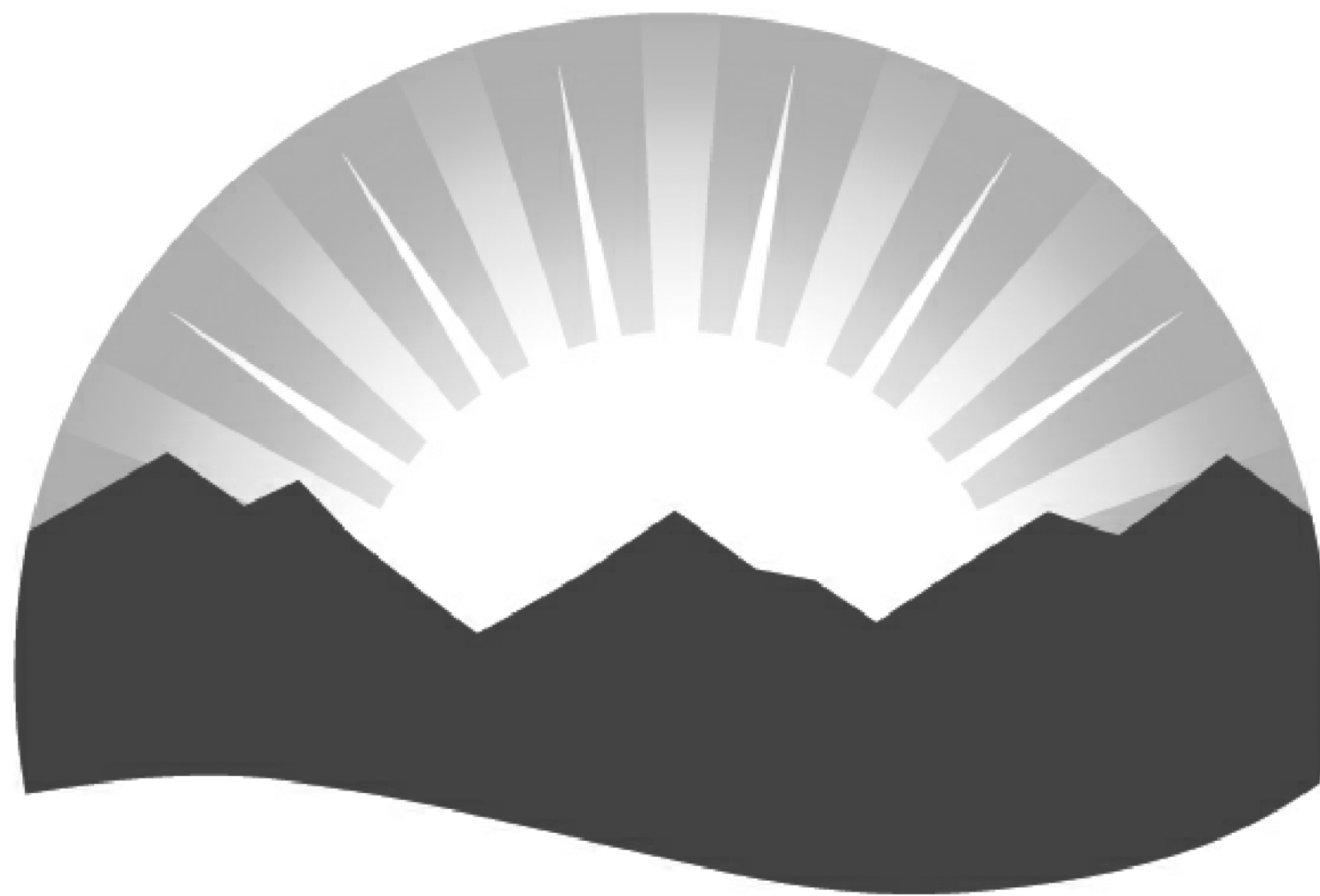
APPENDIX C – MARKETING, PUBLICITY AND COMMUNICATIONS

1. Media events and promotional materials regarding the Project shall not occur without the prior knowledge and agreement of the Province. The Recipient will provide at least 15 working days' notice to the Province's Rural Dividend contact of media events. Media events include, but are not limited to, news conferences, public announcements, official events or ceremonies, news releases, or release of documents.
2. Notice of a media event shall be provided by the Recipient to the Province's Rural Dividend contact. Current contact is:
Ruraldividend@gov.bc.ca

Notification of a new contact may be provided from time to time.

3. Any media event shall take place at a mutually agreed date and location. The Recipient will acknowledge the Financial Contribution made by the Province on any signage, posters, exhibits, pamphlets, brochures, advertising, websites, forms, or other publications produced by the Recipient and related to the Project, in terms satisfactory to the Province.
4. The Recipient will use the Province's logo in acknowledging the financial contribution of the Province. Any and all use by the Recipient of the Provincial logo and statement will be in the form provided by the Province, and will comply with the graphic standards and any conditions communicated, by the Province to the Recipient from time to time. The Province's logo and graphic standards document is incorporated by reference into this Agreement.

The statement to accompany acknowledgement is as follows: "We gratefully acknowledge the financial support of the Province of British Columbia"



BRITISH
COLUMBIA



BC ID Graphic Standards

Touchstones

BC Mark

Positive (pos) for light backgrounds

Vertical

Horizontal

Note the dark blue type and mountains

Reverse (rev) for dark backgrounds

Note the white type and lighter blue mountains

Colours

Corporate Gold

Pantone 130C
CMYK 0 . 30 . 100 . 0
RGB 227 . 168 . 43
HEX #e3a82b

Corporate Blue

Pantone 288C
CMYK 100 . 67 . 0 . 23
RGB 35 . 64 . 117
HEX #234075

Corporate Blue (Reverse)

Pantone 70% of 288C, or 7462
CMYK 70 . 47 . 0 . 16
RGB 101 . 121 . 158
HEX #65799e

Fonts

Adobe Garamond Pro

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789 \$&

Note the elegant "serifs"

Font Family is available from:
MyFonts.com;
Adobe.com;
Paratype.com

Adobe Myriad Pro

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789 \$&

Note there are no "serifs"

Font Family is available from:
MyFonts.com;
Adobe.com;
Paratype.com

BC ID Graphic Standards Guide Online

<http://gwww.bcid.gov.bc.ca/overview.asp>

idir log-in required.

BC ID Graphic Standards

Tips for reproducing the BC Mark in print

To simulate any shade of colour in a print document, printers usually employ varying sizes and patterns of tiny **halftone spots** (spots made up of many dots of Cyan, Magenta, Yellow and Black ink or toner) created with a **line screen**. A line screen is the measure of how many halftone dots of ink are printed in a linear inch. The value is expressed as **Lines Per Inch (LPI)**. This important measure also defines the necessary **resolution** of an image.

For most print projects, the general BC Marks described previously and below are downloadable from the BCID Graphic Standards Guide Online website. These files are usually suitable.

However, some printing and reproduction methods do not use line screens or halftone spots. For those special projects that do not use line screens, several artwork variations of the provincial mark have been created. These are illustrated below.

Consult with the professionals at either the Queen's Printer (250 387-3309) or Government Communications' Graphic Design Unit (250 387-1337) for advice regarding the provincial mark artwork to use to properly match the reproduction method.

Best tip to guide any reproduction decision: The sun is a bright light and so should always be the brightest part of the mark.

If fine Line Screen (i.e.: lithography, digital desktop printing. Note gentle fade in sunrays.)			If harsh or no Line Screen (i.e.: silkscreening, engraving or casting. Note solid tines in sunrays.)		
OK		"cmyk pos" file	OK		"solid pos" file printed with blue ink
Not bad		"gry pos" file (cmyk file above is best option)	Not bad		"solid rev" file printed with white ink
NO		"cmyk rev" file (not enough contrast for province's name)	NO		"solid rev" file printed with black ink
NO		"solid rev" file (not enough contrast for province's name)	NO		"solid rev" file printed with black ink
Not bad		"gry rev" file (cmyk file below is best option)	NO		"solid pos" file printed with white ink
OK		"solid rev" file	OK		"solid rev" file printed with white ink

BC ID Graphic Standards

Cheats

Colour Spaces



CMYK

Usually only Cyan, Magenta, Yellow and Black inks are used in 4-colour or 'process' printing.

These four inks can create any colour in a print document by being printed together as tiny *halftone spots*.

Use CMYK files in print applications, ideally the *vector* file formats.

GREY

GREY files use a single printing ink (like black) only. This version of the mark is meant for print jobs where printing 4-colours is too expensive.

Use GREY files in print applications, ideally the *vector* file formats.



RGB

Red, Green and Blue light is displayed on computer monitors and televisions.

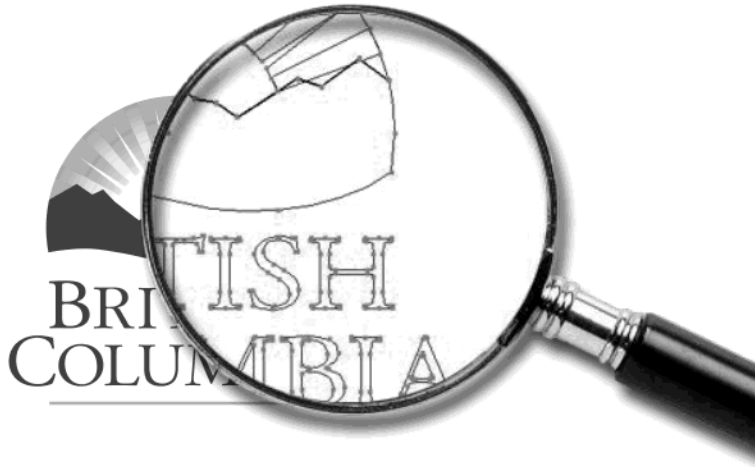
Projected together, these three colours of light can create any colour in video.

Use RGB files on-screen, ideally the *bitmap* file formats.

BC ID Graphic Standards

Cheats

File Formats



Vector Files

Vector files use geometric shapes to create images. Images made with vectors are most versatile because they can be enlarged or reduced to any size without degrading the image.

Files with "EPS" or "AI" file extensions are vector files.

Microsoft Word can display vector EPS files, so consider inserting these files into your Word documents instead of JPEGs or TIFs.

Vector versions of the BC Mark are best suited to printed communications.



Bitmap Files

Use bitmap files with caution. Bitmaps are ideally suited to photographic imagery. In fact, all digital photographs are bitmaps.

Bitmap file formats create images by mapping tiny, square building blocks called pixels. If bitmap images are enlarged too much, these pixels become obvious and the quality of the image is degraded.

There are many different flavours of bitmaps, each with their own strengths and weaknesses. JPEGs, TIFs, BMPs, PNGs and GIFs are all bitmap file formats. They should be distributed and used with caution.

Bitmap versions of the BC Mark are best suited to online or video communications.

SCHEDULE A – Appendix 1A

Sample Interim Reporting Template

As detailed in the Rural Dividend Grant Agreement between the Province and the Recipient, the Province requires the Recipient to submit an Interim Progress Report on project performance on May 31st and November 30th of each year of the project duration. To satisfy this requirement, please complete this Interim Progress Report form and submit it to the Ministry of Forests, Lands and Natural Resource Operations via email at <mailto:ruraldividend@gov.bc.ca>

Section I – Project Information & Contact Details		
Applicant Name:	Project Name:	Project/Grant Agreement Number:
Address:	Phone Number:	Email:
Estimated Completion Date: (yyyy-mm-dd)	Community/Communities Served by Project:	Population of Community/Communities:
Project Funding Stream:	Date Interim Progress Report Submitted:	
Section II – Project Costs & Funding		
Project Cost	As stated in Grant Agreement	Actual Costs to Date: (insert date)
Total Project Cost	\$	\$
Salary and Wages	\$	\$
Consulting and Professional Fees	\$	\$
Travel and Meetings	\$	\$
Training	\$	\$
Marketing and Promotion	\$	\$
Other Costs	\$	\$
Equipment, Capital and Supplies	\$	\$
Infrastructure	\$	\$
Project Funding Categories	As stated in Grant Agreement	Actual Funding to Date: (insert date)
Applicant RD Funding Request	\$	\$
Applicant Financial Contribution	\$	\$
Partner Financial Contribution	\$	\$
Government	\$	\$
Other Funding Sources	\$	\$
In-Kind Contribution	\$	\$

Please provide a brief explanation of the variance(s).

Section III – Project Progress

Please provide a detailed description of the work completed for the project to date. The description should reference the originally approved project description as well as the Expected Results identified in Schedule A of the signed Grant Agreement.

Please provide a detailed description of progress the project has made regarding the Deliverables identified in Schedule A of the signed Grant Agreement.

Please provide a brief description of the role(s) of any partners identified in the original application in the project. This description should reference the original description and indicate any changes to the partner(s) role. *(Required for Partnership projects.)*

Please provide a brief description of any risks to project completion, mitigation strategies and lessons learned from the work completed to date.

Please provide any additional information about the project including work completed and upcoming tasks that have not been addressed in the previous questions.

Section IV – Project Performance

Please provide a brief description of direct employment that has resulted from the project to date.

Please provide numbers of the jobs directly created by the project to date:

Direct full time jobs:

Direct part time jobs:

Direct temporary or seasonal jobs:

Please provide a brief description of any in-direct employment that has resulted from the project to date.

Please provide an estimate of the number of in-direct jobs that have resulted from the project to date.

Please only respond to the following questions if they are applicable to your project. If your project does not involve the activity described in the question please enter "N/A".

Please identify any training / skills development opportunities that have been provided through the project to date.

Please provide additional information regarding training / skills development opportunities provided to young adults (age 14 -35).

Please identify any employment resources developed or provided through the project to date.

Please identify any economic development resources or capacity¹ developed through the project to date.

Please identify any business support or business creation services provided through the project to date. Please include details regarding the sector in which the businesses are being supported / created.

Section V – Additional Comments

Please use this space for any additional comments, information or feedback for the BC Rural Dividend. *(Not required)*

Section VI – Certification

Principal Appointed Officer (please print):

Email:

Signature:

Date:

YYYY

MM

DD

Project Manager (please print):

Email:

Signature:

Date:

YYYY

MM

DD

Please email the completed Interim Progress Report to: <mailto:ruraldividend@gov.bc.ca>

By signing Section VI – Certification, you are certifying that the information contained in this form is to the best of your knowledge correct and complete.

¹ Economic Development Resources/Capacity is defined as (1) plans, strategies and reports; and (2) increased staff/consultant resources to support economic development.

SCHEDULE A – Appendix 1B

Sample Final Reporting Template

As detailed in the Rural Dividend Grant Agreement between the Province and the Recipient, the Province requires the Recipient to submit a Final Progress Report on project performance no later than 30 days after the end of the term of the Grant Agreement. To satisfy this requirement, please complete this Final Progress Report form and submit it to the Ministry of Forests, Lands and Natural Resource Operations via email at <mailto:ruraldividend@gov.bc.ca>

Section I – Project Information & Contact Details			
Applicant Name:	Project Name:	Project/Grant Agreement Number:	
Address:	Phone Number:	Email:	
Date Project Completed: (yyyy-mm-dd)	Community/Communities Served by Project:	Population of Community/Communities:	
Project Funding Stream:	Date Final Progress Report Submitted:		

Section II – Project Costs & Funding			
Project Cost	As stated in Grant Agreement	Actual	Variance
Total Project Cost	\$	\$	\$
Salary and Wages	\$	\$	\$
Consulting and Professional Fees	\$	\$	\$
Travel and Meetings	\$	\$	\$
Training	\$	\$	\$
Marketing and Promotion	\$	\$	\$
Other Costs	\$	\$	\$
Equipment, Capital and Supplies	\$	\$	\$
Infrastructure	\$	\$	\$
Project Funding Categories	As stated in Grant Agreement	Actual	Variance
Applicant RD Funding Request	\$	\$	
Applicant Financial Contribution	\$	\$	\$
Partner Financial Contribution	\$	\$	\$
Government	\$	\$	\$
Other Funding Sources	\$	\$	\$
In-Kind Contribution	\$	\$	\$

Please provide a brief explanation of the variance(s). Please provide separate documentation and substantiating information as necessary:

Please provide a brief description of what project costs Rural Dividend funding was used towards.

Please provide a list of all other funding sources for the project (if there are not enough rows in the table, please attach an additional page detailing all funders not listed below):

Name of Funder	Program Name (if applicable)	Amount	Date Awarded
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	

Section III – Project Description

Please indicate if the project was the next phase of a successful, Rural Dividend-funded Project Development application.

Please provide a detailed description of the completed project. The description should reference the originally approved project description, as well as the Expected Results identified in Schedule A of the signed Grant Agreement. Please explain if the project scope has changed from the originally approved description and why.

Attach the completed deliverable, if available.

Please provide a detailed description of progress the project has made regarding the Deliverables identified in Schedule A of the signed Grant Agreement.

Please provide a brief description if the project will continue now that funding is completed or indicate if there are any subsequent phases to the project.

Please provide a brief description of any infrastructure costs included in the project and the final product. This description should provide details regarding maintenance responsibilities, ownership and the role of the infrastructure in the overall project.

Please provide a brief description of the role(s) of any partners identified in the original application in the project. This description should reference the original description and indicate any changes to the partner(s) role. *(Required for Partnership projects.)*

Please provide a brief description on the lessons learned from delivering the project including: what worked well and what should be changed if the project was delivered again.

Section IV – Project Performance

Please select one or more of the Rural Dividend project categories that are most applicable to your project

Building Community Capacity

Workforce Development

Community and Economic Development

Business Sector Development

Please explain how the project met the goal(s) of the above selected categories.

Please provide a brief description of the community benefits resulting from the project (i.e., how the project supported increased resilience or improved the economic and social circumstances of the community).

Please provide a brief description of direct employment that resulted from the project.

Please provide numbers of the jobs directly created by the project:

Direct full time jobs:

Direct part time jobs:

Direct temporary or seasonal jobs:

Please provide a brief description of any in-direct employment that has resulted from the project.

Please provide an estimate of the number of in-direct jobs that have resulted from the project.

Please only respond to the following questions if they are applicable to your project. If your project does not involve the activity described in the question please enter "N/A".

Please identify any training / skills development opportunities that have resulted from the project.

Please provide a brief description of the project impact on young adults (age 14 – 35). For example, has the project has contributed to training and skills development opportunities for youth in the impacted community? If applicable, please provide the number jobs created for young adults by the project.

Please identify any employment resources developed or provided through the project.

Please identify any economic development resources or capacity¹ developed through the project.

Please provide a brief description of how the project has supported business creation in the community, including if any new businesses have started as a result of the project. Please include details regarding the sector in which the businesses were supported / created.

Section V – Additional Comments

Please use this space for any additional comments, information or feedback for the BC Rural Dividend. *(Not required)*

¹ Economic Development Resources/Capacity is defined as (1) plans, strategies and reports; and (2) increased staff/consultant resources to support economic development.

Section VI – Certification of Completion

This will certify that project number _____, as described in the project description and approved by the Province of British Columbia, is now complete and operational.

Principal Appointed Officer (please print):		Email:			
Signature:		Date:	YYYY	MM	DD
Project Manager (please print):		Email:			
Signature:		Date:	YYYY	MM	DD

Please email the completed Final Progress Report to: <mailto:ruraldividend@gov.bc.ca>

By signing Section VI – Certification of Completion, you are certifying that the information contained in this form is to the best of your knowledge correct and complete.

From: [Rural Dividend FLNR:EX](#)
To: [O'Neal, Anna FLNR:EX](#)
Subject: FW: Voice Mail (28 seconds)
Date: August 19, 2019 1:17:45 PM
Attachments: [2503646461 \(28 seconds\) Voice Mail.mp3](#)

From: Microsoft Outlook On Behalf Of TERRY VANHORN
Sent: Friday, April 5, 2019 10:11 AM
To: Rural Dividend FLNR:EX
Subject: Voice Mail (28 seconds)

You received a voice mail from TERRY VANHORN at [2503646461](#).

Caller-Id: [2503646461](#)



Lower Columbia Foreign Direct Investment Strategy

December 18, 2015



Presented to:

Lower Columbia Initiatives Corporation
1355 Pine Ave.
Trail, BC V1R 4E7

Prepared by:

Lions Gate Consulting
207-2902 West Broadway
Vancouver, British Columbia

Executive Summary

Introduction

- The purpose of this project is to provide a foreign direct investment (FDI) strategy (the Strategy) for the Lower Columbia Initiatives Corporation (LCIC) that will advance understanding of the challenges and opportunities of key sectors in the region, identify target foreign markets, set priorities for future investment and identify marketing initiatives. The Strategy will complement and support existing LCIC services and programs.

The Economic Setting

- The Lower Columbia has economic resources and assets that could support further FDI. A diverse set of resource industries, Teck Trail Operations, low-cost hydro-electric energy, a quality labour pool, quality infrastructure, proximity to the USA and good business support services provide a solid foundation for building productive capacity through FDI.
- The small local population and market, mountainous terrain that handicaps transportation services, shortage of economic infrastructure like broadband in some smaller outlying areas and availability of appropriately zoned and market-ready land and usable building space remain challenges to economic diversification.
- There are many investment attraction targets in the Lower Columbia, including existing and potential new enterprises. The Metallurgical Industrial Development Acceleration and Studies (MIDAS), emerging niches in recycling, environmental technologies and media are complemented by Trail's and Rossland's downtowns high speed fibre optic network, airport services and commercial and industrial land development opportunities.

Foreign Direct Investment Trends

- FDI will become increasingly important as a component of successful regional economic development. International trade is increasingly dramatically stimulated by free trade agreements, liberalized trade policy and the growing influence of emerging markets, as a competitive producer but also as a source of outbound investment capital. The world's population is expected to continue grow and stimulate demand for the type of products and services exported by Canada. Technology and the knowledge economy will continue to expand in developed nations as basic manufacturing declines. However, the demand for natural resources, including food, water and energy, which this province has in abundance, will continue to grow. Finally, environmental and sustainability challenges will also affect how trade and investment flow in the future.
- Effective economic development for rural communities starts with taking care of existing businesses and entrepreneurs inside the region. Not only do they create the majority of jobs, they also represent targets for FDI. Business Retention, Expansion and Attraction (BRE+A)

is the foundation of economic development programming and is absolutely necessary for effective FDI activities. International outreach that leads to FDI is not worth the effort without the close involvement of local businesses and institutions.

- Business and investment attraction can be a confusing and potentially expensive for rural communities. Close partnerships with senior government trade programs is an obvious way to identify targets and pathways for action. Approaches that are most amenable to rural communities included targeted outreach, inbound missions and visitation, and special events and programs. Outbound missions and marketing campaigns are less likely to be effective unless they are highly targeted with strong local business leadership.

Strategy Recommendations

Guiding Principles	Strategic Goals	Targets
Leverage core assets	Competitive Export Businesses	Sectors
Focus on export base	Expanded Productive Capacity	Institutions
Think beyond the region	Job and Income Growth	Supply chain
Integrate local programs		Emergent
Integrate govt. programs		

Strategies	Start/Frequency	Pg
1. Conduct an internal work flow analysis to compare/match resources against the organization's responsibilities, to ensure allocations support outcomes.	ST/P	31
2. Prepare development tools that proactively support business investment and attraction	MT/O	34
3. Align investment attraction efforts with Business, Retention and Expansion (BRE)	ST/OT	36
4. Promote traded activities and local supply sourcing	MT/O	37
5. Provide site location assistance to qualified investment candidates	I/O	38
6. Develop leads by communicating and building relationships with local companies	MT/O	39
7. Establish an Ambassador program	LT/P	40
8. Develop relationships with senior government trade officials for intelligence on emerging opportunities	I/O	41
9. Promote the region to site location professionals	LT/O	42
10. Work with City of Trail on Esplanade land sales and development	I/P	44
11. Work with partners to lever the MIDAS initiative	ST/O	45
12. Develop a succession planning program with local business leaders that can attract new investment and expansion	LT/O	47
13. Establish Lower Columbia as a global leader in the Circular Economy	I/O	48
14. Promote innovation & technology focusing on Web 2.0-4.0	MT/O	51
15. Promoting the Electric Highway and related opportunities	MT/O	53
16. Update and expand marketing collateral	I/O	54
17. Monitor FDI initiatives, evaluate effectiveness and report out	I/O	57

Notes: ST=Immediate, MT=2 to 3 years, LT=3 to 5 years, O=Ongoing, P=Periodic, OT=One Time

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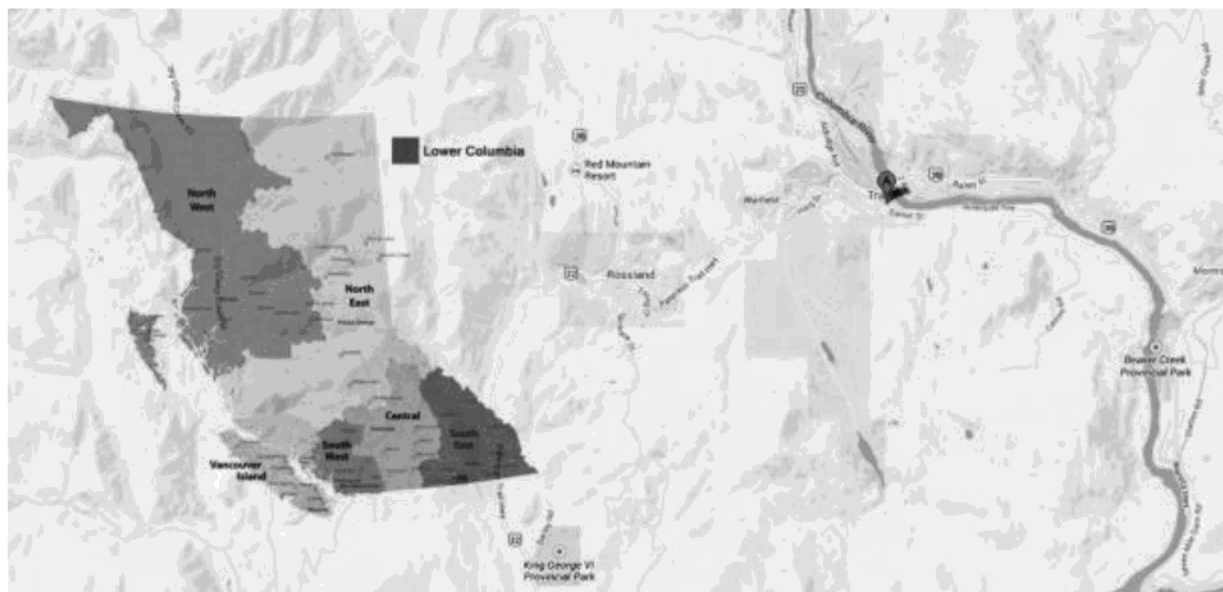
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INTRODUCTION

1.1 LOWER COLUMBIA INITIATIVES CORPORATION

Lower Columbia Initiatives Corporation (LCIC) was created in 2010 as a partnership of five municipalities (City of Rossland, City of Trail, Village of Warfield, Village of Montrose and Village of Fruitvale) and electoral areas A & B of the Regional District of Kootenay Boundary (RDKB). Based in Trail, LCIC's mandate is to provide economic development services to the Lower Columbia Region and more specifically to serve as the 'first place of call' for development opportunities develop and to support a competitive business environment that fosters economic growth. In addition to assisting existing business and industry, LCIC shares information with potential investors, existing businesses, and other service providers to advance local projects and economic priorities.

Figure 1 Lower Columbia Initiatives Corporation Service Area



Source: LCIC (2015a)

1.2 PURPOSE

The purpose of this project is to provide a FDI strategy (the Strategy) that will advance understanding of the challenges and opportunities of key sectors in the region, identify target foreign markets, set priorities for future investment and identify marketing initiatives. Target markets have been linked to local industrial and business capacity, including the mining/metallurgical and manufacturing sectors.

The Strategy will complement and support existing LCIC services and programs, including business retention and expansion services to local business, Invest Kootenays (<http://www.investkootenay.com/>), Work West Kootenay (<http://www.workwestkootenay.ca/>), and Thriving Kootenays marketing initiative.

1.3 METHODOLOGY

The research conducted in preparing the Strategy consisted of a literature review and compilation of economic data from statistical agencies and trends that were used to prepare the assessment of economic resources and investment attraction trends. A regional visit allowed the consulting team to meet with key stakeholders and visit the area and its commercial and industrial sites. A follow-up interview program provided further guidance for the Strategy recommendations. Literature, data sources and personal communications are noted in Chapter 5 of this document.

1.4 REPORT STRUCTURE

Chapter 2 presents a Current Situation Analysis, which comprises assessment of local assets, key sectors, trends in FDI and strengths, weaknesses, opportunities and threats (SWOT).

Chapter 3 examines the context for a regional FDI program with reference to national and provincial roles, policies and practices.

Chapter 4 presents the strategy recommendations, including a framework and marketing strategy for international investment attraction in the LCIC service area.

Chapter 5 comprises literature and research sources and all personal communications.

ECONOMIC RESOURCES

2.1 MAJOR INDUSTRIES

Table 1 compares the goods-producing and service-producing labour forces of the Lower Columbia and BC for two census periods, 2001 and 2011. It can be seen that in both regions, there is a trend towards an increasing share of employment in service-producing industries. As traditional resource industries reduce production capacity or become more efficient in production, employment tends to decline. In contrast, service industry employment is growing due to the increasing consumption of public services, increased technology inputs and expansion of knowledge-led sectors such as professional, scientific and technical services.

Table 1 Allocation of Employment to Goods and Services Production, 2001 and 2011

Industry Class	Lower Columbia			BC		
	2001	2011	Percent Change	2001	2011	Percent Change
Goods producing	3,030	2,860	(5.6%)	417,410	430,195	3.1%
Services producing	6,365	7,150	12.3%	1,597,195	1,875,115	17.4%
Undetermined	250	140	(44.0%)	45,345	48,930	7.9%
Total	9,645	10,150	5.2%	2,059,950	2,354,240	14.3%

A comparison of the top ten industries by employment in the Lower Columbia between 2001 and 2011 is presented in Table 2. The difference between the two periods is marginal with the primary metal manufacturing and trades contracting the only two industries in the top ten. Goods production in the top ten industries accounted for 37.4% of employment in 2001 and this declined only slightly to 34.3% in 2011.

Table 2 Top 10 Industries by Employment, Lower Columbia, 2001 and 2011

Industry	2001 Employment	Industry	2011 Employment
331 Primary metal manufacturing	1,510	331 Primary metal manufacturing	1,030
622 Hospitals	625	622 Hospitals	625
722 Food services and drinking places	595	611 Educational services	585
611 Educational services	560	722 Food services and drinking places	565
232 Trade contracting	420	445 Food and beverage stores	475
445 Food and beverage stores	365	238 Specialty trade contractors	460
621 Ambulatory health care services	300	541 Professional, scientific and technical services	385
541 Professional, scientific and technical services	290	561 Administrative and support services	360
624 Social assistance	250	621 Ambulatory health care services	315
913 Local, municipal and regional public administration	240	221 Utilities	240
Total for Top Ten	5,155		5,040
Goods Production as % of Top Ten	37.4%		34.3%
Total Labour Force	9,645		10,150
Top 10 as % of Total Labour Force	53.4%		49.7%

2.2 EMPLOYMENT CONCENTRATION

A review of a slightly broader regional study area that includes the Regional District Kootenay Boundary (RDKB) shows a broadly similar economic base. Statistics Canada allocates labour force activity to hundreds of goods and service producing industries. The highest level of aggregation is 21 major industries, presented in Table 3 for the RDKB according to their employment concentration, when compared to a benchmark area, in this case Canada. Higher levels of employment concentration imply the existence of comparative advantages that are driving the regional economy. Average concentrations mean the industry is employing workers at roughly the same rate as the rest of Canada, while low concentrations indicate below average performance in that industry. Concentration is a much different metric than absolute employment as presented above in Table 2. The former is a relative measure and thus is deemed to be indicative of a distinct competence in the regional economy.

There are two major takeaways from Table 3: first, local wealth and investment activity is heavily oriented toward goods production, specifically in forest and mineral products, and second, several services sectors with good potential for future growth are under-represented in the business base, including transportation, information and culture and professional, scientific and technical services. It was shown above in Table 2 that employment in professional, scientific and technical services was

actually an above-average performer in the Lower Columbia between 2001 and 2011. However, when compared to the Canadian economy, employment in this sector is relatively smaller.

Table 3 Major Industry Employment Concentrations in RDKB, 2011

Employment Concentration	Major Industry
High	Agriculture, forestry, fishing and hunting Mining, quarrying and oil and gas extraction Utilities Manufacturing Construction Health care and social assistance
Average	Retail trade Administrative and support, waste management and Remediation services Education services Arts, entertainment and recreation Accommodation and food services Other services (except public administration) Public administration
Low	Wholesale trade Transportation and warehousing Information and cultural industries Finance and insurance Real estate and rental and leasing Professional, scientific and technical services Management of companies and enterprises

Source: Vann Struth Consulting Group (2014)

Table 4 provides further insights into the detailed industries that are responsible for employment within the region. Again, the dominance of goods production in minerals, forestry and construction is apparent, but beverage and chemical manufacturing are also represented. The services represented do not appear to be export related and instead are either supply or consumer industries.

Table 4 Detailed Industry Top Ranked Employment Concentrations in RDKB, 2011

Detailed Industry
Non-ferrous metal (except aluminum) production and processing
Pesticide, fertilizer and other agricultural chemical manufacturing
Other non-metallic mineral product manufacturing
Other heavy and civil engineering construction
Veneer, plywood and engineered wood product manufacturing
Logging
Metal ore mining
Coal mining
Beverage manufacturing
Gasoline stations
Vocational rehabilitation services
Sawmills and wood preservations
Other wood manufacturing
Other personal services
Automotive parts, accessories and tire stores
Grocery stores
Other amusement and recreation industries

Source: Vann Struth Consulting Group (2014)

2.3 DEVELOPMENT ACTIVITY

A major target of investment capital is real estate through improvements to land or the development and renovation of buildings. Residential, commercial, industrial and institutional developments require local permitting which is tracked by statistical agencies, and made available in time series. Table 5 shows the value of building permits issued by LCIC member municipalities between 2007 and 2014. Values are highly variable, with a high of \$40 million in 2007 and a low \$3 million the very next year. The average annual value during this period was approximately \$12 million. Trail and secondarily Rossland account for the bulk of activity.

Table 5 Lower Columbia Building Permits, 2007 to 2014

	2007	2008	2009	2010	2011	2012	2013	2014
	(\$000s)							
Fruitvale, VL	75	158	50	269	153	160	556	136
Montrose, VL	15	0	0	0	0	0	0	0
Rossland, C	7,110	1,023	95	2,263	149	313	1,436	4,912
Trail, C	33,615	1,946	4,533	8,341	2,920	15,730	11,037	1,617
Warfield, VL	5	12	0	0	95	0	637	0
Total	40,820	3,139	4,678	10,873	3,317	16,203	13,666	6,665

Source: BC Stats (2015a)

Table 6 outlines the assessed values for LCIC municipalities in 2015. As anticipated, a significant amount of the assessed value is from the City of Trail which has a total general assessed value of over \$930 million; this is followed by the City of Rossland with \$516 million. In total the local municipalities had a general assessed value of \$1.89 billion in 2015.

Table 6 Assessed Values for Lower Columbia Municipalities, \$2015

Municipality	General Purposes Residential	General Purposes Utilities	General Purposes Major Ind.	General Purposes Light Ind.	General Purposes Bus. and Other	General Purposes Managed For. Land	General Purposes Recreation Non-Profit	General Purposes Farm	Total General Purposes Assessed Value
Fruitvale	174,063,300	275,775	0	0	9,320,950	0	0	3,199	183,663,224
Montrose	102,248,800	41,200	0	0	1,139,500	0	0	0	103,429,500
Rossland	481,314,600	2,857,600	0	189,600	28,577,500	34,700	3,002,600	15,210	515,991,810
Trail	623,968,100	16,058,150	172,702,200	2,372,400	117,763,300	316,400	1,239,300	0	934,419,850
Warfield	152,790,000	378,300	0	457,000	2,562,900	0	0	0	156,188,200
Total	1,534,384,800	19,611,025	172,702,200	3,019,000	159,364,150	351,100	4,241,900	18,409	1,893,692,584

Source: BC MCSCD (2015a)

Table 7 outlines the property tax rates for municipalities in the LCIC region in 2015. Rates vary by municipality and are based on the assessed values of the properties in the community and the revenue needs of the community. In addition, the property tax rate also include components that also go towards the regional district, hospital, and school funding.

Table 7 Property Tax Rates for Municipalities in Lower Columbia, 2015

Purpose of Tax Rate	Residential	Utilities	Supportive Housing	Major Industry ¹	Light Industry	Business	Managed Forest Land	Recreation Non-Profit	Farm ¹
Village of Fruitvale									
Municipal	2.7002	12.1509	2.7002	9.1807	9.1807	5.9404	8.1006	2.7002	2.7002
Reg'l District	3.2073	11.2256	3.2073	10.9048	10.9048	7.8579	9.6219	3.2073	3.2073
Hospital	0.3030	1.0605	0.3030	1.0302	1.0302	0.7424	0.9090	0.3030	0.3030
School	2.8706	13.6000	0.1000	5.8000	5.8000	5.8000	2.2000	3.3000	6.9000
Other	0.4623	1.9125	0.4027	1.8722	1.5371	1.1545	1.5461	0.4623	0.4623
Total	9.5434	39.9495	6.7132	28.7879	28.4528	21.4952	22.3776	9.9728	13.5728
Village of Montrose									
Municipal	1.9340	9.6700	0.0000	0.0000	0.0000	3.8680	0.0000	0.0000	0.0000
Reg'l District	3.2073	11.2255	0.0000	0.0000	0.0000	7.8578	0.0000	0.0000	0.0000
Hospital	0.2849	0.9972	0.0000	0.0000	0.0000	0.6981	0.0000	0.0000	0.0000
School	2.8706	13.6000	0.1000	5.8000	5.8000	5.8000	2.2000	3.3000	6.9000
Other	0.4404	1.8358	0.3808	1.7977	1.4626	1.1009	1.4804	0.4404	0.4404
Total	8.7372	37.3285	0.4808	7.5977	7.2626	19.3248	3.6804	3.7404	7.3404
City of Rossland									
Municipal	7.2517	40.0000	0.0000	0.0000	21.8900	12.7025	19.3464	6.3873	7.1333
Reg'l District	1.9138	6.6983	0.0000	0.0000	6.5069	4.6888	5.7414	1.9138	1.9138
Hospital	0.2782	0.9736	0.0000	0.0000	0.9458	0.6815	0.8345	0.2782	0.0548
School	2.8706	13.6000	0.1000	5.8000	5.8000	5.8000	2.2000	3.3000	6.9000
Other	0.3721	1.5968	0.3125	1.5655	1.2304	0.9335	1.2755	0.3721	0.3721
Total	12.6864	62.8687	0.4125	7.3655	36.3731	24.8064	29.3978	12.2514	16.3740
City of Trail									
Municipal	4.1120	40.0000	0.0000	42.5254	2.6344	8.2237	11.7890	5.8178	0.0000
Reg'l District	2.7270	9.5446	0.0000	9.2717	9.2717	6.6812	8.1810	2.7270	0.0000
Hospital	0.2850	0.9976	0.0000	0.9690	0.9690	0.6982	0.8550	0.2850	0.0000
School	2.8706	13.6000	0.1000	5.8000	5.8000	5.8000	2.2000	3.3000	6.9000
Other	0.0598	0.5037	0.0002	0.5037	0.1686	0.1684	0.3386	0.0598	0.0598
Total	10.0544	64.6459	0.1002	59.0698	18.8437	21.5715	23.3636	12.1896	6.9598
Village of Warfield									
Municipal	4.0762	10.1905	0.0000	0.0000	4.0762	4.0762	0.0000	0.0000	0.0000
Reg'l District	1.9580	6.8693	0.0000	0.0000	6.4223	4.6698	0.0000	0.0000	0.0000
Hospital	0.3034	1.0620	0.0000	0.0000	0.9950	0.7234	0.0000	0.0000	0.0000
School	2.8706	13.6000	0.1000	5.8000	5.8000	5.8000	2.2000	3.3000	6.9000
Other	0.4626	1.9135	0.4030	1.8732	1.5381	1.1553	1.5470	0.4626	0.4626
Total	9.6708	33.6353	0.5030	7.6732	18.8316	16.4247	3.7470	3.7626	7.3626

Source: BC MCSCD (2015b)

2.4 MAJOR PROJECTS

The BC Major Projects Inventory lists two projects in the Lower Columbia under construction and one on hold.

Construction of Columbia Power Corp.'s Waneta Hydroelectric Expansion Project is nearing completion. SNC-Lavalin Inc was awarded a \$587 million design/build contract for the project. The Red Mountain Ventures project in Rossland commenced in 2005 and has been ongoing. Ski hill, residential and hotel developments are included. The No. 4 Furnace project at Teck's Trail Operations is currently on hold. (BC Stats 2015b)

On a smaller scale, the Kootenay Boundary Regional Hospital is planning extensive building and surgical equipment capital projects over the next year. The City of Trail is tendering the construction of the pedestrian bridge over the Columbia River, which will be one of the longest suspension bridges in North America. An integrated Library and Museum Facility that will be built downtown is also being planned, while Trail Regional Airport terminal building improvements are also contemplated. Rossland is undertaking a \$3 million water main upgrade. Other projects include two new car dealerships, a new restaurant and the potential construction of an \$18 million hotel property (Ashman 2015, pers. comm.).

A new development is the Metallurgical Industrial Development Acceleration and Studies (MIDAS) facility which will be located in Trail. MIDAS is a sector-targeted applied science research and commercialization centre providing downstream metallurgical expertise, a digital fabrication laboratory and business development. (LCIC 2015b)

2.5 ESTABLISHMENT COUNTS

Table 8 outlines the number of establishments by location and with employees in the Lower Columbia and British Columbia between 2007 and 2014. The number of establishments with employees has risen by 18.0% during this period, but most of that occurred in 2009 and 2010. The establishment count has held steady since.

Table 8 Number of Establishment Locations in the Lower Columbia and BC, 2007-2014

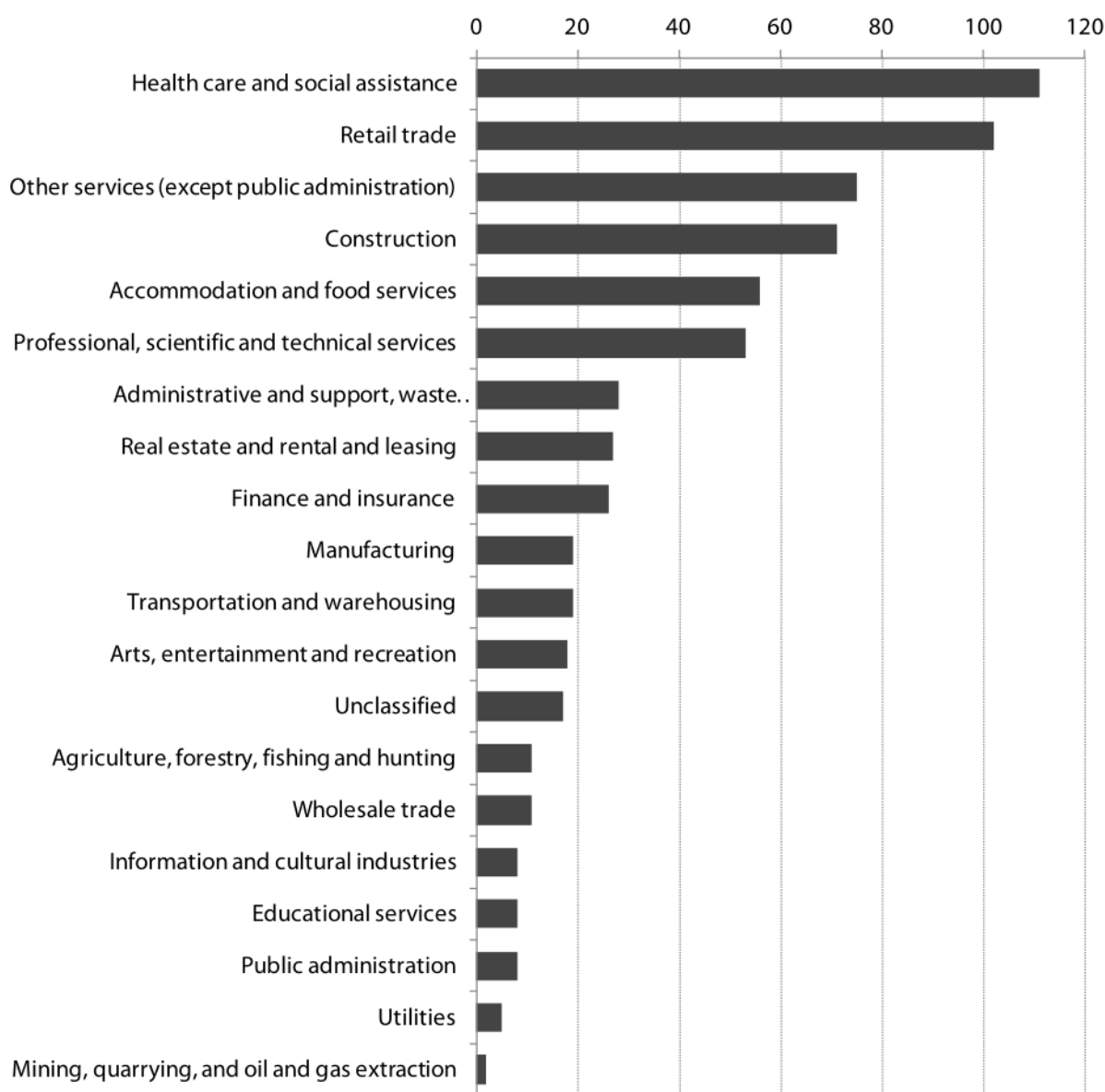
	2007	2008	2009	2010	2011	2012	2013	2014
Lower Columbia	577	581	659	677	690	690	679	681
BC	172,372	175,003	176,124	175,913	175,589	175,950	183,667	190,384

Source: BC Stats (2015c)

The number of business locations by industry for the Lower Columbia in 2014 is shown in Figure 2. Health care, retail trade, services and construction businesses dominate the list but accommodation and food services and professional, scientific and technical services are also prominent. Services that

are delivered by public agencies such as public administration and education tend to have few businesses even though they contribute significantly to the local economy. Similarly, mining, oil and gas and manufacturing typically have fewer business establishments although their employee size can be well above average.

Figure 2 Number of Business Locations by Industry in the Lower Columbia, 2014



Source: Statistics Canada (2014)

2.6 BUSINESS CLIMATE

In recent years, the Columbia Basin Rural Development Institute (RDI) has been surveying Kootenay businesses concerning business retention and expansion issues. More than 500 business respondents were surveyed and one of the areas of enquiry is business climate factors. When prompted to rate the business climate in the Kootenays, there was no single issue that received an excellent rating and only one, access to highway or roadway infrastructure, was considered good. Most factors were given an average rating, among them access to markets, real estate, transportation services (such as access to suppliers, availability of road transport services and access to airport facilities) and cultural and recreational amenities. Housing, warehousing facilities, and labour force issues were generally rated toward the bottom of the list. The major constraints to expansion were access to financing, lack of skilled staff, identifying or accessing new markets, local zoning regulations, lack of suitable premises and broadband access. (Vann Struth Consulting Group 2014)

In terms of the Lower Columbia, where 147 businesses were surveyed, the RDI results were similar but also reflected key differences. The factors that received the highest number of fair or poor ratings included the provincial tax structure (68%) and the local tax structure (55%). The factors that received the highest number of good or excellent ratings included cultural/recreational amenities (73%) and K-12 education (71%). Workforce quality and stability were rated more highly in the Lower Columbia than in the Kootenays, although workforce availability was rated poor-average in both regions. (CBRDI 2013)

When asked to list the community's strengths as a place to do business, the highest number of respondents cited the area's small town nature and lifestyle. Twenty-nine respondents cited the region's stable economy and 28 discussed the positive economic impact of big industry players in the area. When asked to list the community's weaknesses as a place to do business, the highest number of respondents (31) cited cross-border or online shopping. Twenty-four respondents stated that the area's small market is an issue. The highest number of respondents (23) stated that 'red tape' and government (particularly local governments) are barriers to growing the community's economy. Thirty percent of respondents indicated that they are key suppliers and 65% of respondents indicated that there are key customers to attract to the region. Suppliers cited by multiple businesses included internet/phone service providers, clothing/shoe stores, food stores, restaurants and various types of manufacturing businesses. Customers cited by multiple businesses included tourists, amenity migrants, families, seniors, entrepreneurs and manufacturers. (RDI 2013)

2.7 STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS ANALYSIS

Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis is a tool that helps communities identify areas of productive economic activity and wealth creation. SWOT is meant to address strategically relevant issues of comparative advantage or disadvantage, which become targets for sustaining or enhancing (in the case of strengths and advantages), mitigating and converting (in the case of weaknesses or threats) or developing and diversifying (in the case of opportunities). An overview of key strengths, weaknesses, opportunities and threats for the Lower Columbia is provided in Figure 8.

Relevant strengths fall into the following six main categories:

- Significant natural resources that have and will continue to support forestry, mining, tourism and energy development. The natural surroundings and abundance of outdoor recreational opportunities is a key contributor to the region's quality of life as well.
- A major industrial tenant, Teck Trail Operations, that is one of the world's largest fully integrated zinc and lead smelting and refining complexes produce refined zinc and lead, a variety of precious and specialty metals, chemicals and fertilizer products.
- Low-cost hydro-electric energy supply.
- A quality labour pool with a high proportion of workers with trades and apprenticeship certification. This is complemented by several regional trades and technical training programs, including through Selkirk College and major employers like Teck.
- Quality infrastructure, including reliable rail and highway connections to USA and West Coast ports, expanding air services, affordable real estate to most metro areas and other BC regions like the Lower Mainland and Okanagan, land for industrial or commercial purposes, and the recently opened high speed fibre optic network in downtown Trail.
- Affordable housing is a major strength and could contribute to migration from southwest BC. Escalating land prices puts the Lower Columbia in an ideal position to provide low land and housing tax cost where investors can, in many cases, purchase lease property for less than 50% than many other area in Western Canada.
- Physical proximity to the US border and location between the major regional markets of Vancouver, Calgary and Spokane.
- Business support services such as networks such as Community Futures, Basin Business Advisors Program and KAST, and programs such as Venture Acceleration, as well as local financing available through credit unions, Community Futures and local banks.
- A strong sense of place identified as the 'Kootenay culture' that supports local enterprises, including local food production, combined with a friendly and safe small-town atmosphere that makes the integration of newcomers relatively easy.

Weaknesses fall into the following six general areas:

- The population in the Lower Columbia, and the Kootenays in general, is older than the BC average and it is growing very slowly. The workers and families of the future will have to be attracted into the region because natural population trend (i.e. births minus deaths) is in decline.
- There is strong inter and intra-provincial competition for skilled labour, particularly in trades and technical occupations, from major industries in the region as well as oil and gas sector in northern BC and Alberta. This tends to force up wage rates, which adds to community wealth, but can also be a strain for lower-paying industries, such as those in the accommodation and food and beverage sector.
- The mountainous terrain can be a handicap for many air and highway transportation services, especially in the winter. Distance from major metropolitan markets in eastern North America is also an issue.
- The Lower Columbia, and the Kootenays in general, represent a very small domestic market, with comparatively fewer business and commercial services in competing regions. This tends to inflate business costs.
- Although Trail is now well served by broadband capability, the same cannot be said for smaller communities and rural areas, where basic services such as cell coverage are lacking.
- Existing firms often have difficulty locating appropriate leasable space or zoned land for expansion. Potentially available land is frequently not market-ready, creating a lag in meeting new opportunities. This applies to large, serviced parcels and commercial facilities.

Opportunities in the Lower Columbia

- The Metallurgical Industrial Development Acceleration and Studies (MIDAS) project is a sector-targeted applied science research and commercialization centre providing downstream metallurgical expertise, a digital fabrication laboratory (“fab lab”) and business development support in the West Kootenay region of BC and holds potential to leverage the by-products produced by Teck into value added components and new manufacturing ventures locally and further support the region as a metallurgical manufacturing hub.
- The following existing and emerging business groups have the potential for further development as competitive clusters:
 - battery and e-waste recycling;
 - environmental technologies¹; and

¹ For example, Trail-based AC Global Systems provides GPS tracking and idling software that reduces CO2 emissions by 20%.

- media and production.
- The regional workforce is skilled in metallurgical technologies, something that very few regions in Western Canada have—this could be a competitive advantage for industries in need of these inputs.
- Businesses in downtown Trail can now connect to the new high speed fibre optic network, owned by the Columbia Basin Broadband Corporation (CBBC) and the City of Trail, this increased connectivity opens up new communication and technology opportunities.
- The Trail Regional Airport is undertaking a land use plan and will be making approximately 15 acres of sub-dividable, un-serviced land available for aeronautical or non-aeronautical commercial/industrial development opportunities.
- Key land development opportunities throughout the region that hold potential to attract new investment and business activities with key properties including:
 - Esplanade Lands in downtown Trail;
 - WAX Lands, 33.46 acres, located in Electoral Area A of RDKB;
 - 5N Parcel, high tech manufacturing plant located on 16.59 acres located next to CPC Laydown Yard, in close proximity to airport;
 - Red Mountain resort development opportunities near Rossland;
 - Municipality owned Midtown Transition Area, a 5 acre area in Rossland;
 - 2795 Highway Drive – 1 acre on the leading volume auto manufacturer franchise in the West Kootenays, zone C5 will be listed by Colliers International by Spring 2016; and
 - 8000 Highway Drive – 1.66 acre of property subdivided and ready for construction or renovation, zone C7 will be listed by Colliers International by Spring 2016.
- There will be potentially new opportunities related to the North-South highway link, connecting Washington State to the border at Waneta and on to Revelstoke. This is now a priority since Spokane, Washington received the USA government federal funding. This route would primarily benefit truck traffic and with it associated opportunities for transportation, storage and warehousing.
- Another opportunity that has re-emerged in the last year is cross border and online shopping targeting the US. Some local suppliers are now exporting goods and equipment to the US because of the sharp rise of the US dollar versus the Canadian dollar (Ashman 2015, pers. comm.).

INVESTMENT ATTRACTION TRENDS

3.1 MACRO TRENDS

The local effects of macroeconomic trends are often difficult to spot because they can take a long time to emerge and may be masked by change attributable to other factors. They nevertheless influence investment flows and the ongoing process of wealth creation within regions and communities. The following trends have had and will continue to have an effect on economic development in BC and the Lower Columbia region.

Globalization of trade and financial markets

International trade has increased dramatically over the last two decades. Global exports as a share of global GDP increased from just below 20% in the early 1990s to over 30% at the peak of the financial crisis in 2007-08. The International Monetary Fund projects that a new peak will be achieved sometime this decade (CDEPS 2013). Domestically, pending free trade agreements with the European Union, Pacific Rim countries and other jurisdictions will amplify the effects of globalization.

Growth in emerging markets

The International Monetary Fund (IMF) predicts that the total GDP of emerging markets will soon overtake that of developed economies. They already attract almost 50% of foreign direct investment (FDI) global inflows and account for 25% of FDI outflows. By 2020, they are expected to account for nearly 50% of all global GDP growth (Ernst and Young 2012). There are two dimensions to this phenomenon, the first being the heightened competition for FDI that regions in the developed world will have to respond to if they wish to expand their production capacity. And second, emerging market companies will increasingly make outbound investments into other emerging and developed economies.

Population growth and urbanization

The world's population is expected to exceed nine billion by 2050, with most of this growth in Asia. The global population is expected to continue growing, but at a slower rate. It will also get gradually older and increasingly reside in urban areas (UN Secretariat 2013). An expanding middle class living in urban areas will stimulate business and significantly increase demand for physical and soft infrastructure (Ernst and Young 2012).

Environmental and sustainability issues

One of the effects of globalization and related change in demographic, socioeconomic and technological states is environmental degradation that accompany rising demand for natural resources and energy that may be exceeding the earth's bio-capacity (UN Secretariat 2013). Climate change and the effects on biodiversity loss will raise the sustainability challenge in the future.

The decline of manufacturing

The economies of industrialized, western nations continue to experience a transition from goods production to service production due to globalization, competition from developing and emerging markets, and the increasing adoption of technology—particularly computer systems and the Internet. Manufacturing capacity has shifted overseas to lower cost jurisdictions, with less onerous environmental regimes and proximity to emerging markets. In 2011 alone, Canada lost 14,000 manufacturing jobs (Finkle 2012). In addition, technology allowing for on-the-spot micro fabrication like 3D printing will continue to erode large-scale manufacturing. However, large-scale manufacturing trends are not necessarily universal, homogenous or uni-directional. As capacity becomes more globally balanced some developed regions will inevitably experience new areas of growth, especially as technology supports affordable localized manufacturing that reduces the carbon footprint of global transportation.

The dominant role of technology

As discussed in the previous section, manufacturing is increasingly technology-led with integrated software systems, flexible and innovative manufacturing concepts, virtual production through computer modelling, sophisticated supply chain management and the like. Production centres that are not considered a competitive advantage, including many routine business functions (such as basic manufacturing and customer service desks), are being outsourced, with technology as the enabling mechanism.

Competition for human capital

In North America approximately 40 million workers are unemployed, yet many employers are saying they cannot find the workers with the skills they need (Finkle 2012). There is a growing skills gaps with youth unemployment, which is a specific area of concern.

The growth of networks

Regions that are experiencing growth have been able to develop the network capacity and infrastructure that appeal to growing companies, their workers and capital. This is being leveraged with alliances among research facilities, educational institutions, government and businesses. Business networks and communications technology is especially important in attracting globally mobile labour and capital that is the foundation of high-value job creation.

Food, water and energy demand growth

Global population growth will increase demand for food, water and energy resources worldwide (National Intelligence Council 2012). Canada has these commodities in abundance and is well positioned to increase trade in related products and services.

3.2 BUSINESS RETENTION AND EXPANSION - THE CORNERSTONE FOR INVESTMENT ATTRACTION

Effective economic development for communities means paying a significant amount of attention to local business health, both individually and collectively, as well as the associated social-amenity and liveability standards that most people have come to expect as minimal requirements of their status quo.

First and foremost, it's about taking care of business and the entrepreneurs who choose your community to establish roots.

Existing local businesses generate the majority of new jobs in a community, and it can be as high as 90 per cent depending on the structure of the economic base (Boyles 2014). A variety of programs and activities may be implemented as part of a community's business care platform, but the best practices of the economic development discipline are straightforward, they are BRE+A. How these activities are carried out can vary greatly from community to community, but generally rely on local resources, expertise and priorities, and range across these three categories:

- Business Retention and Expansion;
- Investment and Business Attraction; and
- Community Development.

Integrated into these, is an emerging and powerful business trend revolving around social enterprise. It is especially popular with younger generations and youth who see entrepreneurial opportunity to make a difference either in their own community or beyond it. Social enterprise can be either 'for profit' or 'not for profit' but has components of both revenue generation and philanthropic effectiveness that resolves a social, economic or environmental issue. A focus on social entrepreneurship should be included in a community BRE program.

Executing a BRE program is a structured, action-oriented approach to business and economic development. This proactive outreach style of interviews identifies opportunities to support local business retention, facilitate expansion and promote attraction. There are many reasons to implement BRE programs, but the six main objectives include:

- To establish a presence and build an active relationship with local business;
- To gather information on business challenges or opportunities, and identify expansion plans;
- To detect 'red flags' and companies at risk of leaving/downsizing/closing;
- To lever relationships for business match-making that links businesses with resources and opportunities;
- To gather information that will improve the business climate with new or modified programs, services and regulations;

- To support businesses at every stage of development from ideation to commercialization and globalization; and
- To attract additional investment and business suitable to local socio-economic conditions.

While there are many moving parts to a BRE program, managing it effectively generates a better understanding of the business community, identifies the needs of business clients and where/when they need support, forms relationships that lead to additional prosperity, and helps the community become tactical when it comes to investment attraction. This is all accomplished through scheduled visitation and outreach programs, informed intervention, and working with partners to identify and participate in appropriate international outreach that leads to investment.

The broader benefits of BRE are significant. Besides being the perfect vehicle to establish strong relationships with local business operators, this type of approach provides the community with a timely method of identifying opportunities for investment, growth and preventing leakage by elevating ‘red flags’ that can be resolved before a business closes or relocates. This is a proven methodology that produces trackable results and levers partnerships, as well as helps to identify trends and influences that impact local prosperity and business function. Moreover, it builds a base of business champions that are instrumental in promoting additional business and investment in the community—*the most powerful messaging a community can lever is B2B dialogue.*

3.3 INVESTMENT ATTRACTION AND TRADE

Business and investment attraction can be an expensive process for any community. As a rural region with limited resources, it would not be expected that LCIC would engage in an expansive attraction program that includes regular outbound missions and site visits. It can however, work actively with partners who do carry out missions and that are already undertaking the responsibility of investment attraction, primarily the BC Ministry of International Trade (MIT), other provincial government departments that have a mandate for proactive investment facilitation, and federal resources like those at Department of Foreign Affairs, Trade and Development (DFATD), as well as the Canadian Trade Commissioner Service (CTCS).

The benefits of investment attraction are often better understood than most economic development activities, especially when a community is successful in attracting a major employer that boosts local jobs and taxation. Typically communities engage in investment attraction to improve social and economic conditions, and especially to boost taxation that gets reinvested in community amenities and enhanced livability. Other benefits include:

- Diversification in the local economy;
- Improvements in general prosperity;
- Increased and balanced taxation;
- Stronger job markets and talent attraction/retention;

- Socio-economic growth;
- Competitiveness; and
- Improved local amenities.

Community size is important when deciding on whether to engage in investment attraction, but not the only factor. The Lower Columbia region has opportunities for development, which, as identified in previous studies, has mainly to do with natural and built assets some of which are differentiators in the competitive context.

Investment attraction programs can take many forms, and most small communities have a passive or responsive approach that reacts to inquiries as opposed to generating them. This is a reasonable approach in communities with minimal resources, so long as there are mechanisms in place for effective response. LCIC has some human and financial capacity that can be both responsive and proactive when it comes to investment facilitation and attraction. Generally however, the range of investment attraction activities and programs are surprisingly diverse. They include:

- Targeted outreach and connection – includes tactical outreach campaigns that target sector leaders, and specific company executives with a follow up strategy to reach out directly;
- Inbound missions and visitation – work with provincial and federal partners to understand when and how to be involved in missions and delegations, investigate opportunities to involve local business leaders that can either champion the community and businesses that are investment ready;
- Marketing and information campaigns – this can be part of a local placemaking campaign that involves both paid and unpaid media, social media, public relations and messaging that carries a Lower Columbia value proposition around livability, affordability and business;
- Outbound missions and visitation – work with provincial and federal partners to understand how to be involved in outbound missions and delegations, to even participate in missions that have a high probability of outcomes, and or support business delegates from the community in their efforts to participate (especially important for export marketing);
- Special events and programs – identify opportunities to host business and sector events that can showcase the opportunities in the Lower Columbia, especially local business leadership in a B2B format, for business and investment; and
- Follow up and after care – it's the quality of the follow up that sets communities apart in their effectiveness, and LCIC can establish a strong program of follow up as part of its BRE+A efforts.

3.4 INTERNATIONAL TRADE AND EXPORT MARKETS

Though FDI and export/trade market initiatives can differ, a combined focus is an effective way to manage resources. In the Lower Columbia the focus should be on brokering and partnering—

especially on understanding which local businesses might be ready to explore export markets (the BRE outreach will flag these) and support their efforts by connecting them with programs and services that will assist the process and provide access to outbound missions.

Trade is vital to local wealth creation. British Columbia's small, open economy has gained from the expansion of global trade in the last several decades, with the value of goods and services exported rising 71% between 1988 and 2010, outstripping Canada's overall GDP growth.

The advancement of technology, expanding business networks and supply chains, and trade liberalization will increase the world wide flow of goods and services, in BC, as elsewhere. The field of competition for local firms, especially those already engaged in exporting activities, will grow as will demands to seek out and diversify product and market choices. There is increased need for BC companies to branch out beyond their traditional domestic markets if the traded economy is going to grow.

Provincial agencies like Trade and Invest BC prioritized trade expansion, and offer services from market data to outbound missions, with supporting programs and policies being provided by other sections of the Provincial Government. Trade is also a priority for the Government of Canada. Industry Canada offers information with toolkits and guidance on exporting basics, while the Canadian Commercial Corporation works with suppliers on all aspects of government procurement including defence industries.

Export Development Canada and the Business Development Bank (BDC) both offer export financing assistance. The BDC also offers a consulting service for a variety of business planning areas, including export development. They will assist with identifying high-potential markets and international business plans.

The Department of Foreign Affairs and Trade Development Canada is responsible for international trade policy, trade negotiations and agreements, as well as import and export controls. It manages Canada's Trade Commissioner Service who represents national interests around the world and provides access to trade incentive programs like Foreign Trade Zones (FTZ's).

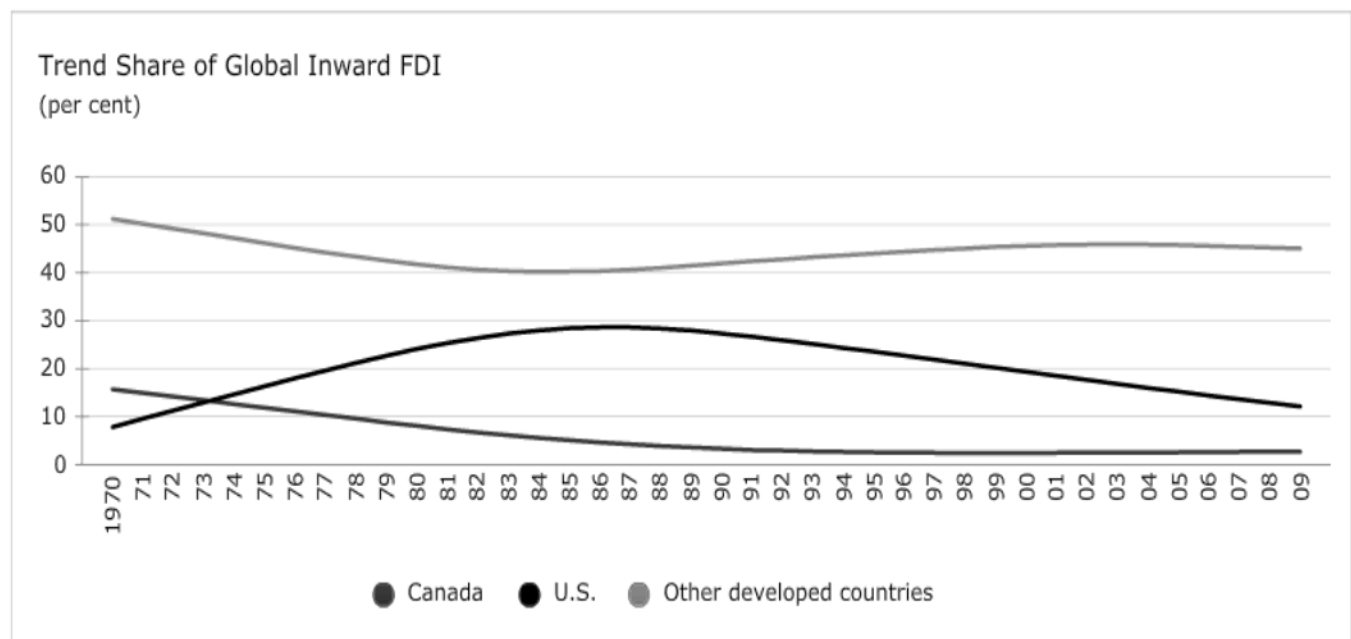
3.5 FDI TRENDS

Regardless of community size, business and investment attraction efforts are most effective when they are well informed. This especially relates to understanding the national value proposition for investors—who begin their investigation at a national level, and how to benchmark competitiveness from both a global and a local perspective. Canada ranks extremely well on most global investment rankings and has remained competitive in its bid to attract Foreign Direct Investment (FDI) through the last decade's massive changes in global banking and investment (Table 1).

Table 9 Canada's Performance in International Business Indices

Measure	Year	Rank or value
TI Corruption Perceptions index	2013	9 of 177
Heritage Foundation's Economic Freedom index	2014	6 of 177
World Bank's Doing Business Report "Ease of Doing Business"	2013	19 of 189
Global Innovation Index	2013	11 of 142
World Bank GNI per capita	2012	\$50,970
State of World Liberty index	2014	10 of 180
Human Development Index	2014	8 of 187
Global Peace Index	2014	7 of 162
Economist Democracy Index	2013	8 of 167

Despite its competitiveness however, Canada's overall global share of inward FDI has gradually dropped over the past few decades (Figure 3) because of the current global shift to developing nations. Yet it still attracts more than its fair share on a per capita GDP basis. A more detailed explanation by the Conference Board of Canada provides insights to this trend (Conference Board of Canada 2015). Some of that change is also an indicator that Canada is becoming a smaller global economic player overall as emerging markets like China and Brazil gain strength and add volume to international monetary activity and trade. In many respects, this optimistically means Canada has more market investment and FDI opportunities than ever before, but in a more competitive environment. This is good news for Lower Columbia, but demands focused and informed efforts to produce results.

Figure 3 Canada's Share of Global Inward FDI Since 1970

Source: UNCTAD (2015)

Global markets themselves have adjusted dramatically in the past decade, and we now live in an era of integrated trade where global supply chains are driven by FDI. This presents opportunities that communities like Lower Columbia can capture with clear and proactive strategies, many of which are outlined in this strategy.

The top five global markets for FDI in 2015 are the USA, China, India, Indonesia and Brazil. Canada is not always seen as a robust market for FDI, but of the three main factors that drive investment—markets, resources and efficiency, Canada presents some strong niche appeal.

For 2015 most global organizations that track FDI are forecasting increased optimism as investment flows continue to recover from 2013 lows. Investor uncertainty remains high pushing countries like Canada to the forefront because they offer some of the world's safest and most stable investment opportunities, despite lower expectations of return. Where investor confidence was neutral in 2013, causing global FDI activities to dip, more than half of the United Nations Conference on Trade and Development (UNCTAD) annually-surveyed executives were either optimistic or very optimistic about 2015. The potential for a pent-up reserve of interest in global investment means opportunity for proactive Canadian communities as investment confidence rises into 2016.

3.6 INVESTMENT READINESS – PREPARING TO ATTRACT AND FACILITATE INVESTMENT

A major influence on the effectiveness of a community's economic development strategy, is the level of its investment readiness. A community's ability or willingness to facilitate investment will impact a deal—even when it makes sense. Communities that are successful in attracting investment have done the required groundwork and the research, making sure they are very clear about what investment is a good fit and why, and then they pursue it.

Determining the type of investment that is appropriate for a community involves several steps including understanding the types of investment that can be made. Knowing where the community's assets fit helps define what type of FDI to pursue. According to a number of sources including the International Finance Corporation (IFC), academics and government, there is no single definition of FDI. However, the DFATD and other leading institutions like Conference Board of Canada provide some structure to FDI, and generally classify it in these four ways:

- Resource seeking – commonly takes advantage of natural and local resources;
- Market seeking – looks to gain market share;
- Efficiency seeking – opportunities to increase cost-competitiveness; and
- Strategic asset seeking – usually involves strategic asset seeking via mergers and acquisitions.

The following check list is quick assessment guide, customized for LCIC, providing an effective exercise to determine the area's state of readiness.

Table 10 Investment Readiness Checklist

Answer the Following Questions About Your Community	
Does your designated contact person have an understanding of site selection requirements and a database suited for site selectors and investors?	Y / N
Does the official plan support a wide range of commercial and industrial land uses and are these clearly designated geographically?	Y / N
Are policies and programs developed to facilitate and manage investment and development, and do you have an effective GIS system that is open source?	Y / N
Are home-based businesses or occupations supported?	Y / N
Do you have a clear process for development permitting and land use planning? Do you have materials that easily articulate approval processes, with time guidelines and costs?	Y / N
After an investment is made or a business established, is there a review of the process with the proponent as part of your after-care programs?	Y / N
Does your community have an active business retention/expansion program that engages the business community and leading organizations like the Chamber of Commerce, KAST, CF, etc?	Y / N
Does your community collect a base of stats and data on business activity, and can your budget accommodate data collection and market research for special projects?	Y / N
Does your designated contact person have a clear understanding of contacts and procedures in cases where business approvals and permitting are not handled locally?	Y / N

FDI STRATEGY

4.1 CURRENT ACTIVITIES

LCIC engages in FDI through a number of current activities, as seen in its Sales and Marketing Plan for 2015 (Table 11). The focus areas of awareness, content development and digital marketing are adding to LCIC's capacity as an information clearing-house and networking agent.

Table 11 LCIC 2015 Sales and Marketing Plan

Goal	Strategy	Tactics
Build Awareness of Local Economy	Increase confidence in local economy and create informed ambassadors for the region.	Thriving communities matrix Press release distribution list Message effectiveness research Meaningful messaging program Local business investing metric Accommodator inventory/relations Commercial activity statistics Newsletter list Website widget Training provider relations
Digital Ambassador	Optimize the role of web search in promoting the LCIC and region.	News blog Search page text ads Identify geographic targets Optimize Google ad landing pages Update/upgrade website Update invest pages to align with BC
Recruitment Awareness Within Region	Showcase the region's many diverse job opportunities and attract skilled labourers to the region.	Update/maintain website data Maintain relations with key employers Online professional registry Promote local consultants Recruit metallurgy specialists Coop students webpage

In 2013, LCIC also delivered a BRE program. As discussed in Chapter 3, BRE is a fundamental building block of any FDI or marketing program because most lead generation and investment flows are associated with existing companies and supply chain relationships. The Columbia Basin Business Retention and Expansion Project in 2013 identified the following BRE issues in the Lower Columbia:

- Over \$60 million in new development (2014-2017);
- Opportunities for sourcing of local supplies;

- A well-documented skills and training deficit; and
- Looming succession and business planning. (RDI 2013)

Another initiative undertaken in 2015 was the successful Business Walk program. Volunteers visited 135 businesses in the LCIC service area. Major challenges identified in the program included staff retention, signage, promotional activities and generating more foot traffic for local retailers and service businesses. Recommended actions include connecting businesses to pool their resources, succession planning and support, labour market support and collaborative marketing.



4.2 STRATEGIC PRIORITIES

The strategic priorities presented below include principles, goals and attraction targets provide a framework within which LCIC can conduct its decision-making. Principles are those fundamental rules or propositions that guide activities and the chain of reasoning. Goals are the endpoints the organization desires and against which performance measurement is aligned, while targets represent the industries best suited for FDI programming.

Principles

The core principles that determine how LCIC should inform the decision-making of the organization, the identification of sectors and investment attraction priorities, are as follows.

Leverage core assets

- Economic resources such as industry clusters or institutional competencies represent foundations for investment attraction.

Focus on economic base industries

- Economic base and supply industries such as primary, manufacturing, construction, high technology and services that are exported from the region underpin community income and wealth. Increased productive capacity in these industries will automatically induce activity in non-basic industries.

Think Beyond the Region

- The regional economy extends well beyond the LCIC service area. Supply chain relationships exist throughout the Kootenays and beyond, so events and developments in surrounding regions should inform LCIC investment attraction.

Integrate with economic development

- Investment attraction does not occur in isolation from other economic development programming. Coordination among business retention and expansion, tourism and community marketing and infrastructure development will empower investment attraction.

Integrate with provincial and national FDI programs

- National and provincial investment attraction programs provide strategic direction, program support and other resources allow regional FDI activities to be streamlined and targeted.

Goals

The Plan has three main goals that will guide strategic action over the next five years.



Competitive businesses are a foundation of an FDI program because they contribute to cluster conditions and will be the most likely targets of inbound investment. The Lower Columbia economic area, despite the presence of Teck Trail Operations, is small and relatively narrow. Businesses engaged in export activities are highly valued because they expand the economic base and create wealth.

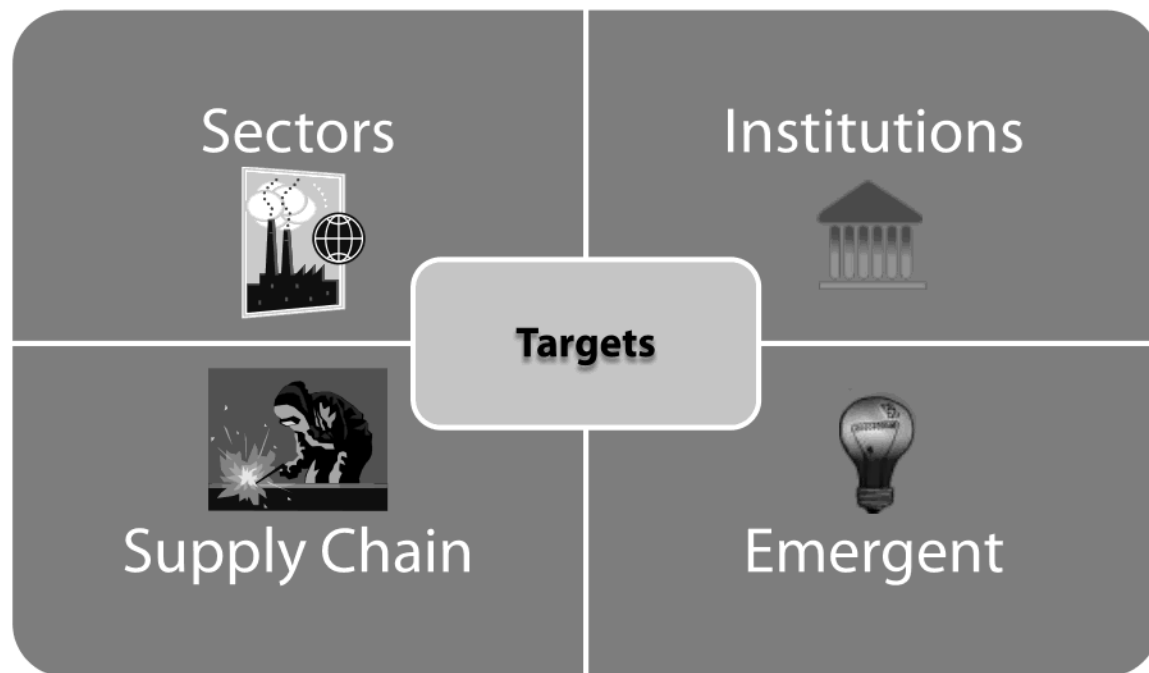
A second core goal is to attract FDI that expands the productive capacity of the regional economy. FDI that replaces local capital can potentially create incremental benefits if the latter remains in the region and is applied to other areas of the economy. Ideally, FDI leads to new or additional production of goods and services that either displace imports or are themselves exported out of the region.

FDI should lead to growth in employment and income opportunities for the resident workers and their families. Jobs and wages underpin quality of life and contribute to the in-migration of skilled workers, which has a stabilizing effect on population and services.

Sector Targets

The targets for FDI programming in the LCIC service area originate in the current regional economic base, as well as its supply chains and supporting institutions, such as education, capital and infrastructure providers (Figure 4).

Figure 4 Investment Attraction Target Dimensions



The historical foundations of the regional economic base are multi-faceted and complex but access to natural resources is an obvious driving force that could sustain further productive capacity in the future, in existing industries but also in other industries that would utilize similar inputs. Section 2.2 identified the following economic base industries as priorities for investment attraction in the RDKB:

- Mining
- Logging
- Non-ferrous metal and non-metallic mineral production and processing
- Pesticide, fertilizer and other agricultural chemical manufacturing
- Wood manufacturing (sawmills, veneer/plywood, engineered products, preservation)
- Beverage manufacturing
- Heavy and civil engineering construction

These industries, of course, reflect the current composition of the economic base and are proposed as targets because they represent a proven pathway for investment attraction in part because of the existence of competitive advantages (e.g. quality timber supply, access to reasonably-priced

electricity). The other dimension to this discussion is the opportunity associated with value-added activities linked to products, by-products and waste materials, which themselves may be inputs to other forms of production. In 2007, the LCCDT Metallurgy Subcommittee identified the following business ideas that could leverage Teck's Trail Operations:

- Alternative metal shapes
- High purity metals
- Alloys
- Bulk and fine chemicals
- Waste and scrap processing

A second source of investment attraction potential is represented by supplier industries who provide services to major industry. Supply chain opportunities may involve the substitution of currently imported products and services or the expansion into export markets by local companies. Local industry has a self-interest in shorter supply chains and being physically closer to key partners and suppliers, but even so the Lower Columbia has a relatively small supplier base. It is for this reason that opportunities are most likely to be identified through the LCIC's BRE program on a case by case basis rather than through top-down targeting of broad industry classifications. This approach to investment attraction is most appropriate in smaller, regional economies where supply chain linkages and participating companies can be more easily recognized.

Institutions may be considered part of the supply chain, depending on how wide the net is cast when defining supplier industries. They are identified separately here because of the special role they play in shaping the business climate and as lead generators. Lending institutions, educational institutions, human resource service providers, the real estate industry, industry associations, non-government organizations (NGOs) and local government may act be involved or intervene through statutory authority or may be providing services that have minor place in the supply chain.

The final target is termed Emergent in recognition of the fact that the future is uncertain. No matter how much technical analysis, research and forecasting is undertaken in preparing an FDI program, unforeseen opportunities can emerge and should not be discounted because they were not foretold. Relatively minor changes in senior government trade and tax policy or macro-economic factors, as examples, may create opportunities that were not apparent under baseline (e.g. existing) or base case (e.g. the future predicated on certain assumptions) conditions. In strategic planning theory, the response to these emerging or new opportunities is commonly known as tactics, the adaptive, action-interaction realignment of economic development activities. Over the longer term, these adaptations can still be ordered in conjunction with established programs and initiatives so the broadly conceived strategic direction remains true. As with the supply chain opportunities, the BRE and aftercare programs are an important source of lead generation.

4.3 STRATEGIC INITIATIVES

Resourcing

Initiative: Conduct an internal work flow analysis to compare/match resources against the organization's responsibilities, to ensure allocations support outcomes

Rationale: In order for any strategy to be executed effectively, resources should focus on the generation of outcomes associated with the organization's responsibilities—including and especially its ED strategies, with a balanced approach to achieving internal (organizational) and external (strategic) goals. Work flows should be consistent with the level of priority for each of the strategic goals, or areas of responsibility, and the organization's performance outcomes measured accordingly. Key factors to consider include budgets, salaried and contracted resources, and what the 'highest and best use' of staff time is according to skills and responsibilities, but especially based on the outcomes expected from shareholders, directors and funders. A plan could look like the sample provided in Table 12. It is important to note that the prioritization in this table is based on the amount of time that should be allotted to each area of responsibility, not how important it is to the organization (as all sample responsibilities listed below are important, and standard to ED management).

Also note that 'responsibilities' and 'outcomes' should be identified and treated separately. Figure 5 provides a very basic overview of CED/ED responsibilities and outcomes that drive economic development.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Develop a weekly work flow chart that includes delivery of this strategy, as well as all other ED and administrative requirements, assess resources and timelines for delivery of each activity and prioritize according to the organization's internal and external objectives, based on the resources available, identify where internal resources should be applied and external resources should be engaged. Develop a transition plan to adjust work flows according to priorities, for example ensuring administrative responsibilities can be delegated to free up internal resources so they can focus on BREA outcomes that will be measured by funding partners. Add outcomes and metrics. Develop a work flow report that can be shared with the board on a quarterly or biannual basis. 	<ul style="list-style-type: none"> To determine whether current allocation of time and resources align with the achievement of the organization's internal and external objectives. Realign resource allocation to reflect strategic priorities and outcomes associated with "driving" economic development. Improve performance and efficiency of the organization Improve relationships with funding partners and deliver expected outcomes tied to funding. 	<ul style="list-style-type: none"> Board directors Funding partners 	High	●	●	●

Table 12 Recommended Allocation of Staff Time

Area of Responsibility/Activity	Level of Priority (1-4)	Staff Resourcing (hours/week)				Expected Outcomes	Measures (sample metrics)
		EDO	Admin	Contract	Other		
Business Retention & Expansion	1	12				<ul style="list-style-type: none"> • Higher performing business climate • Increased profitability • Growth and expansion in revenues and markets, employment, etc 	<ul style="list-style-type: none"> • # of businesses • # of active interventions • growth and expansion values • employment • investment etc
Investment Attraction and Trade	1	12				<ul style="list-style-type: none"> • Increased level of investment • New trade markets 	<ul style="list-style-type: none"> • # of inquiries • pipeline stats & deal flows • investment values, etc
Marketing, Communications & Outreach	2	4				<ul style="list-style-type: none"> • brand, campaigns • comms policies • web sites & social media • awareness and exposure • responses & pipeline generation 	
Organizational Management	2	2				<ul style="list-style-type: none"> • Board, committees etc • HR and general admin/operations 	
Financial and Clerical Management	3	2				<ul style="list-style-type: none"> • Financials • Reporting • Funding and budgeting, etc 	
Partner Management	2	2				<ul style="list-style-type: none"> • 1st degree partners • External partners • Project partners etc 	
Inter-regional Networking	3	.25				<ul style="list-style-type: none"> • Events, presentations, outreach 	
Research and Analysis	1	1.5				<ul style="list-style-type: none"> • Economic • Sectoral • Business and market data 	
Professional Development	4	.25				<ul style="list-style-type: none"> • Conference participation • Training and improvement • Accreditation opportunities • Productivity and efficiencies 	

Figure 5 The Fundamental Disciplines of Economic Development






Development Tools

Initiative: Prepare development tools that proactively support business investment and attraction

Rationale: Too often in investment attraction, not enough consideration is given to those activities and issues that make an area ready for investment and place them in a position to out-compete the competition. Being ready from a planning, zoning, infrastructure, human resource, and incentive perspective is a key part of “being investor ready” and ensures that when the investment opportunity emerges that the effort can remain focused on selling the opportunity instead of trying to address issues and concerns.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Business readiness – it is important to investors to know the proposed development will fit within the context of the local OCP and zoning. In addition, costs such as DCCs and the availability of local infrastructure and development incentives are all part of the investor decision process. LCIC should proactively work with the municipalities and RDKB to determine these factors on high priority opportunities and formulate an approach that can be implemented to support investment success. 	<ul style="list-style-type: none"> Implement best practices in the LCIC region to ensure land development opportunities are ready for investment. 	<ul style="list-style-type: none"> Local municipalities RDKB 	Moderate			
<ul style="list-style-type: none"> Business Investment Team – organize key planning and administrative staff in the local municipalities and RDKB into a team to proactively work on raising the desirability of potential investment opportunity. Identify approaches that will put the best light on specific properties. This may take a variety of forms but could include developing a charrette for a key downtown property or undertake specific infrastructure investments to draw greater attention and highlight a community’s vision and support for a particular development. 	<ul style="list-style-type: none"> Improve how investors are treated and welcomed when they come to look at specific opportunities. 		Moderate			

<ul style="list-style-type: none"> • Provide research to local councils and staff on potential development incentives. <ul style="list-style-type: none"> – Further research is required on the costs and benefits of development incentives, and their application to specific program outcomes. Look at what other communities have done. This might include incentives for the redevelopment of heritage buildings, use conversions (e.g. industrial or commercial to residential) and properties that have the opportunity for employment generating activities. Developer's Cost Charges (DCCs) forgiveness in downtown areas with in-place infrastructure, density bonuses and inducements for green building developments are examples. There are heritage, environmental and community benefits that may arise from these programs. 	<ul style="list-style-type: none"> • Develop incentives that support community development goals and foster investment. 		Moderate			
<ul style="list-style-type: none"> • Funding support – An important exercise is ensuring external resourcing is being leveraged locally. While LCIC has been successful at leveraging funding into the region, it is important to stay abreast of the changing funding opportunities at all levels with new programs regularly emerging federally, provincially and from the CBT. LCIC should work with local partners to ensure that funding is being made available to maximize external investments locally. 	<ul style="list-style-type: none"> • Leverage external resources to support on-going investment opportunities. 	<ul style="list-style-type: none"> • Local communities • RDKB • BC MJTST (regional manager) • CBT • CFGT • BC MSCD • Infrastructure Canada 	Flex			

Integration of Business Retention, Expansion and Attraction (BRE+A)

Initiative: Align investment attraction efforts with the Business, Retention and Expansion (BRE) program

Rationale: The best source of new business leads and information for investment attraction potential is through a community's BRE efforts. BRE studies conducted by CBRDI in 2012 and 2013 have provided a baseline of intelligence on the issues and opportunities facing the Lower Columbia region, and at a broader level, the Kootenays. By using local firms and agencies as a conduit to strategic information about how and where to attract outside investment, the BRE process can be transformed into an integrated BRE+A program. There are many sources of information about general industry investment trends and developments that may provide some guidance when designing an FDI program. But there is no substitute for primary data collected from local businesses which is then able to inform decision-making and allow more focused efforts on priority sectors and initiatives. Local partners can be instrumental in gathering the data and conducting the outreach in a 'many hands' approach that raises the bar on BRE+A program results. It's also vital however for the outreach process to be extremely well coordinated, and for LCIC to take a lead on all activities including ownership of confidential proprietary data. Executing a well-rounded program that integrates BRE+A with trade and export development is a best practices approach for today's economic development teams.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Develop an aftercare database of firms that are foreign owned or have foreign investment. • Customized a survey for the Lower Columbia that identifies issues and opportunities targeted at foreign investment. • Evaluate the CBRDI BRE projects for 2012 and 2013 and design a program of visitation, outreach, data collection and aftercare services for 2016. <ul style="list-style-type: none"> – process for identifying businesses – semi-annual targets for outreach – minimum of one interview per week – report template with data summary, findings, actions and successes • Use the data and software to create a dashboard that demonstrates real-time results and outcomes. 	<ul style="list-style-type: none"> • Integrated BRE+A program that serves foreign as well as domestic companies • Baseline on BRE+A issues and opportunities • Enhanced business climate • Improved network & relationships 	<ul style="list-style-type: none"> • KAST • KRIC • CBT 	High	●		

Initiative: Promote traded activities and local supply sourcing

Rationale: Two natural extensions of a BRE+A program is investment attraction through trade development and the diversification of the local supply chain. Factors such as technological change and trade liberalization are increasing the world wide flow of goods and services, and in the process creating new sources of competition for exporters. Although the Lower Columbia is a small economy, there are some resourceful and innovative export businesses that have opportunities for growth. But there are also some major barriers to that growth such as access to skilled labour. LCIC has limited resources to directly offer export and trade assistance, however it is in the position to broker and facilitate access to resources for local companies, especially those identified as export/investment ready.




In terms of local supply sourcing, the 2013 CBRDI Business Retention and Expansion project identified this issue as an area of action for stimulating economic development (CBRDI 2013). Approximately one third of business respondents had purchased the majority of their supplies from local suppliers and, while it was recognized that many goods and services are not available from within the region, many that were not being sourced locally were. A lack of competitiveness or other barriers may be inhibiting expanded trade in this area and LCIC could initiate research to identify them.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Identify firms who are or may be ready for export marketing. Develop an investment and trade approach or discussion paper, that can be shared with partners who can be engaged in its execution, particularly targeting provincial and federal trade reps in priority sectors and markets. Work with partners who provide investment and trade services to local companies and share the framework with them for discussion, familiarity and engagement. Provide matching and referral services to: <ul style="list-style-type: none"> senior government trade programs major project procurement websites Canadian Company Capabilities registry Produce an online directory of services that can be promoted to project proponents and procurement offices. Host a training seminar or "bootcamp" for local contractors and entrepreneurs that would provide information on how they can participate in major project supply chains. 	<ul style="list-style-type: none"> Increase in export-ready companies Increase in uptake of federal trade programs Increase in trade-related production capacity Expanded regional supply chain 	<ul style="list-style-type: none"> CFDCGT TCC CBT 	Medium		●	●

Initiative: Provide site location assistance to qualified investment candidates

Rationale: According to Columbia Basin BRE Project (CBRDI 2013), many businesses in the region are planning significant investment in expansion over the near term, a portion of which will be spent on real estate. Many businesses stated that they will need a new site to support their expansion needs or that a lack of a suitable premises is preventing their expansion. Actions on this theme may involve assisting in the location of potential expansion sites, or they may relate more to the development approval process. Local government 'red tape' and inefficient approval processes were often cited by respondents as a barrier to economic development in the community.

The study did not indicate the proportion of companies that were foreign owned or had foreign investment, but these companies would have similar needs to their domestic counterparts. Similarly, potential foreign investors and their consultants may need assistance identifying sites and navigating the development approval process. In both cases, coordinated site location assistance can create a positive influence on the investment decision-making process.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Prepare a land and building inventory, utilizing RDKB, municipalities, BC Assessment Authority, and Canadian Real Estate Association (ICX) data. • Design an enquiry response program to screen enquiries, prospects and targets and with guidelines for response timing, information dissemination and follow-up. • Through the BRE+A program, identify businesses looking to expand or find new locations and who may be looking to relocate outside of the region. • Identify local companies through the BRE+A and Ambassador programs who are available to represent the region during site investigations. • Work with local government and real estate professionals to streamline site location process and prepare the appropriate response. This may involve close cooperation with municipalities on identifying sites, help with the zoning, assistance with permitting and other development needs. 	<ul style="list-style-type: none"> • Standardized and timely response to investment enquiries 	<ul style="list-style-type: none"> • Municipalities 	High			

Outreach and Lead Generation

Initiative: Develop leads by communicating and building relationships with local companies

Rationale: Core in-house corporate research capacity and capability is essential to permit quick and informed reaction to enquiries and to proactively research and target prospects in specific sectors, countries and regions. This can be accomplished by nurturing communications with local firms who deal directly or indirectly with foreign investment, either as recipients or as service providers.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Identify local and regional professional services, for example legal or accounting, who consult to foreign investors as part of their prospecting and development planning. Interest in working with LCIC on introducing foreign investors to the region should also be explored. Create a referral program in which economic development agencies notify each other of investment, business development or community development enquiries and events. <ul style="list-style-type: none"> Ensure LCIC is referred to on all new business licence applications for basic sector activities (e.g. excluding retail, personal service and many business services). Identify key partners and develop a protocol for referrals and responsibilities for follow up. 	<ul style="list-style-type: none"> Increase in leads generated through the BRE+A program Increase in external investments 	<ul style="list-style-type: none"> Local professional service firms TCC CBT 	High		●	●

Initiative: Establish an Ambassador program

Rationale: An ambassador program is aimed at encouraging investment, fostering the supply chain and developing cluster activity through a broadening and deepening of the local business network. This is done by inviting volunteers to promote the region. There are many examples of successful ambassador programs in Canada, including communities as diverse as Kingston, Edmonton, Saskatoon and Squamish. The program would provide the resources to volunteers/ambassadors to guide them in promoting business investment in the region.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Prepare program guidelines. The general concept of the program would be to actively promote and market the Lower Columbia through a network of appointed Ambassadors that offer a personal introduction to the region, networking opportunities and trouble-shooting advice to new investors, entrepreneurs and companies. • Develop an orientation guide for volunteers that provides facts and figures, messaging, success stories, and protocols for lead generation. Importantly, the guide would instruct how volunteers promote the Lower Columbia in their day to day conversations and professional activities. • Develop a training program for orientating ambassadors. • Identify and recruit ambassadors, including development of a dedicated web page to host the program. Ambassadors could be any number of stakeholders including civil servants, local business and community members, alumni and expats, interested friends, family members and colleagues in a position to promote the region. 	<ul style="list-style-type: none"> • Personalized recognition of a new or expanded business • Cornerstone of aftercare • Expanded local business network 	<ul style="list-style-type: none"> • Municipalities • TCC • Local Companies • Community Organizations 	Flex			●

Initiative: Develop relationships with senior government trade officials for intelligence on emerging opportunities

Rationale: Lead generation can be enhanced by accessing the information and advice of trade officials and experts in the federal and provincial governments. As noted in Section 3.4, provincial agencies like the [BC Ministry of International Trade](#), which offers services from market data and to outbound missions and programs like the [Provincial Nominee Program](#) can be crucial to rural investment programs. Federal agencies provide information toolkits, export guides, business development and export financing assistance and set international trade policy. Developing and maintaining relationships with upper levels of government in these strategic agencies is part of economic development's central mandate.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Review research, participate in networking events and promote the Lower Columbia with federal, provincial and non-profit agencies responsible for international trade and investment attraction: <ul style="list-style-type: none"> Trade and Invest BC Industry Canada Canadian Trade Commissioner Service Canadian Commercial Corporation Export Development Canada Business Development Bank Foreign Affairs and Trade Development Canada. AdvantageBC, which promotes BC as a favourable location for international business Work with Trade and Invest BC to identify emerging opportunities related to the Trans-Pacific Partnership and the Canada-European Union Comprehensive Economic and Trade Agreement. Set up a telephone interview schedule with trade reps internationally who could assist with the outcomes of this strategy, explain the approach and explore options for engagement and collaboration in priority sectors. Support local companies participating in trade missions sponsored by senior government. 	<ul style="list-style-type: none"> Leverage senior government investment and trade resources Increase participation in senior government investment and trade initiatives Increase in lead generation from senior government contacts 	<ul style="list-style-type: none"> Trade and Invest BC AdvantageBC Export Dev Canada BDC Can Manufacturers & Exporters Can Trade Commissioner Service DFATD Industry Canada 	Medium			

Initiative: Promote the region to site location professionals

Rationale: Site selection is the process of identifying and securing the optimal site for a business that contributes to economic development goals of the region. At the macro level, site location can refer more to a broader location strategy that targets the best region for a firm to locate. Once this has been decided, however, site selection becomes a matter of the actual physical facility, rather than the broader strategy behind that choice. The site selection process can be contracted to site selectors or it may be performed in-house—in either case, incorporating a company’s strategic objectives has become a prime consideration as opposed to a strictly property and financial focus. The implication is that decision making is based on a more comprehensive range of information than real estate professionals can provide and that there is a clear role for economic development agencies as process influencers.

Today, communications technology has changed the way site location occurs and certainly increased its speed. International searches are more prevalent, more intermediaries are now involved. And more economic development agencies from the national level down to individual communities are more involved in marketing their jurisdictions and providing assistance. It is important to note that an organization like LCIC does not get involved at any stage of the site selection process, specifically at the broader screen level where countries and major regions are being considered. The process here is more likely to engage proprietary or government databases than community websites. It is during the short-listing and site visit steps that EDOs enter the picture, and when they do, they need the data tools, incentives and capacity for response to remain in the running.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Build relationships with site location professionals. Real estate organizations could be contacted on an ongoing basis to build awareness of the Lower Columbia as a place to invest and do business. Real estate associations include: <ul style="list-style-type: none"> – Building Owners and Managers Association – BC Real Estate Association – Canadian Urban Institute – Canadian Real Estate Association (CREA) – Landlord.bc – Real Estate Council of BC – Real Estate Foundation of BC – Real Estate Institute of BC – UBC Faculty of Commerce Centre for Urban Economics and Real Estate – Urban Development Institute – NAIOP Vancouver 	<ul style="list-style-type: none"> • Increased awareness for the Lower Columbia • Increase in enquiries • Increase in the conversion of enquiries to prospects • Increase in investment decisions 	<ul style="list-style-type: none"> • Local companies • Real estate industry • IK 	High			●

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Large companies often utilize Design-Build (DB) consultants, who are single source entities that handle everything from site selection, to architectural/engineering design to actual construction and “turnkey” development. A list of Canadian firms is available on the Canadian Design-Build Institute website. Create more exposure for the region among site selection publications. Major periodicals, include: <ul style="list-style-type: none"> Business Facilities is a major location advisor, regularly featuring Canadian articles. It also has a Canadian community listing. Area Development Online has numerous resources and articles on various global locations, their positioning and what they are doing to attract business. A related site to Area Development is Location Canada, a site developed in conjunction with the Canadian Consulate in New York to promote foreign direct investment into Canada, as well as to support the federal and provincial governments’ investment promotion efforts. It provides many resources and articles on Canadian locations. Site Selection Online has regular national and international reports. 	•	•				

Sector Opportunities

Initiative: Work with City of Trail on Esplanade land sales and development

Rationale: One of the key facets of investment attraction is livability for both entrepreneurs and their employees. Ensuring a viable housing mix with a range of affordability and amenities provides a significant boost to employee/talent retention. The ED office is often already networked with professional business development and investment industries, and can add value to the city's approach to expand housing options by supporting and/or leading outreach to developers with the resources to build the housing and associated amenities. Given the importance of livability to effective investment attraction, LCIC could play a strong role here.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Work with the City of Trail to establish a sales and marketing plan to attract land/real estate developers to the Esplanade Lands project <ul style="list-style-type: none"> – Work with city on any environmental issues and solutions, either directly or via joint agreement with potential land developer (working out solutions in advance) – Assemble info materials and project descriptions, profile developer preferences and abilities, and launch outreach program with home builders association leaders targeting medium sized builders from regional centres in Western Canada (Vancouver to Calgary) 	<ul style="list-style-type: none"> • Land development and increased new housing • Amenities development along waterfront and into downtown area • Improvement in housing and livability mix for the attraction/retention of talent 	<ul style="list-style-type: none"> • ED Network • CHBA • GVHBA • CHBA Calgary 	High	●	●	●

Initiative: Work with partners to lever the MIDAS initiative to position Lower Columbia as a leading global region on metallurgical development, develop an action plan to proactively expand development opportunities and attract new business and investment

Rationale: One of the key areas of opportunity that is well recognized in Lower Columbia is associated with the by-product minerals and metals produced at Teck. Key leaders at Teck and in Economic Development on the Metallurgical Committee have assembled an extensive list of by-products that could be developed or refined further for world markets. Many of the metallurgical by-products are produced with enough volume to generate secondary industry, with product potential and global markets. Key partners are exploring how and where some of these opportunities could be pursued via the MIDAS and Fab Lab projects. LCIC can play a vital role in accelerating this process by proactively seeking external partners and investors to develop the products and markets.

In addition, the LCIC can develop a project plan that can, over time, establish Lower Columbia as a global destination in metallurgical development, working internationally with public, private and institutional leaders. This can begin with partnered research that innovates metallurgical development, a process already happening at a micro level in Lower Columbia, that extends into international research institutions and gradually evolves into a series of destination conferences that bring global research and industry leaders to the region. The intent would be to carefully target global innovators and investors who would gradually recognize Lower Columbia's leaders in a North x Northwest style of conference for metallurgical and even component recycling advancement. The unique geography, culture and even access generates a compelling appeal for this type of 'intimate' event that offers a 'lifestyle' element, much like the Grow Conference does for Tech/VC's in Whistler.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Working with the MIDAS team, develop a long-term strategy and action plan that establishes Lower Columbia as a global leader in metallurgical research, product and market development. Included in the strategy, a communications and outreach program to build global recognition. Most immediately, develop a tactical action plan that selects the top 10 to 15 metallurgical opportunities on the committee's list and develop business plans around each, recognizing business and product development synergies between and amongst the minerals, their products (and overlap) and markets. <ul style="list-style-type: none"> Develop a product research list from each that especially includes volumes of production and purity, then add market analysis and target industry/research contacts 	<ul style="list-style-type: none"> Investment and leadership exposure in a globally important business niche Develop/expand business and market/export opportunities Expand global trade markets Exposure for LCIC and regional products/talents New business and employment 	<ul style="list-style-type: none"> Met Committee KAST CBT CFDCGT Selkirk College Universities & UILO offices Teck and all other relevant industries Professional associations and info groups/publications 	High	●	●	●

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> – Identify research centres/universities associated with the key metals and minerals and establish both formal and informal relationships – Explore the establishment of a research fund with public and private sector partners to support these efforts – Working closely with the Metallurgical Committee and other key partners like KAST and Community Futures, identify world markets for semi-refined and refined products and pursue proactively – Establish outreach program to create awareness of the opportunities and “The List” with industry and research associations. Deliver speech and panel addresses, write blogs in industry magazines, etc. – Continue to explore opportunities with the additional metals/minerals/by-products on the list with the same approach – Begin to establish Lower Columbia as a global leader with an annual event (or series of annual events) that attracts innovation leaders, researchers and investors. 						

Initiative: Develop a succession planning program with local business leaders that can attract new investment and expansion.

Rationale: One of the risks for communities outside major urban centres is that of business closure for lack of succession planning. This is not an uncommon priority for rural and smaller urban centres who are becoming more proactive about working with business on succession planning opportunities. LCIC can also play a selective role in working with local business leaders to expose investment opportunities.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Through BRE visits, identify local business owners/leaders (e.g. XL Services) with vital products and/or services to the local business community to identify and develop succession planning opportunities. <ul style="list-style-type: none"> Canvas larger centres for similar businesses and potential partnerships/acquisitions Work with Invest Kootenay team/site to profile business investment opportunities Work with secondary and post-secondary programs to identify succession and apprenticeship synergies Promote business investment regionally 	<ul style="list-style-type: none"> Retain important business products and services in the local supply chain Attract new investment that can expand/retain local business 	<ul style="list-style-type: none"> Local businesses Chamber CFDCGT Invest Kootenay CBT ED Network 	Medium			●

Initiative: Establish Lower Columbia as a global leader in the Circular Economy

Rationale: Industrialized regions have a unique opportunity to establish leadership around waste recycling, environmental rehabilitation and by-product repurposing. While the MIDAS program will address opportunities associated with metallurgical by-products, a strategy to actively expand upon the innovative recycling already taking place will make a strong contribution to establishing Lower Columbia as a leader in environmental recycling and the Circular Economy. A description of the Circular Economy is provided on the following pages as context for this initiative.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Using a similar approach to the MIDAS project, develop a working group specifically assigned to the circular economy and materials recycling. <ul style="list-style-type: none"> Work with Teck and Celgar, and other industrial operators, to produce or refresh waste materials lists that could be used for repurposing, recycling or refurbishment Establish a special focus on energy and biofuel opportunities Expand the approach to other adjoining regions Develop a global research approach to key materials with potential for additional innovation and business development Establish a 'superteam' of leaders who can help develop a library of research documents, theses and speaking opportunities to expose Lower Columbia's leadership in the Circular Economy Establish an event, potentially tied to the MIDAS/metallurgical symposium given the synergies, that attracts global leaders, thinkers, innovators and investors—specifically targeting the Ellen MacArthur Foundation for input and participation, even sponsorship http://www.ellenmacarthurfoundation.org/ 	<ul style="list-style-type: none"> Innovation thinking and materials recycling Establish regional/global leadership in advanced circular economy development Exposure for Lower Columbia as an innovation centre Business development and new investment 	<ul style="list-style-type: none"> ED Network Teck Trail KC Recycling and other business partners like AMEC Nature Works Remediation Corp Selkirk College KAST CDCFGT IRAP/NRC Ellen MacArthur Foundation McKinsey Foundation 	High	●	●	●

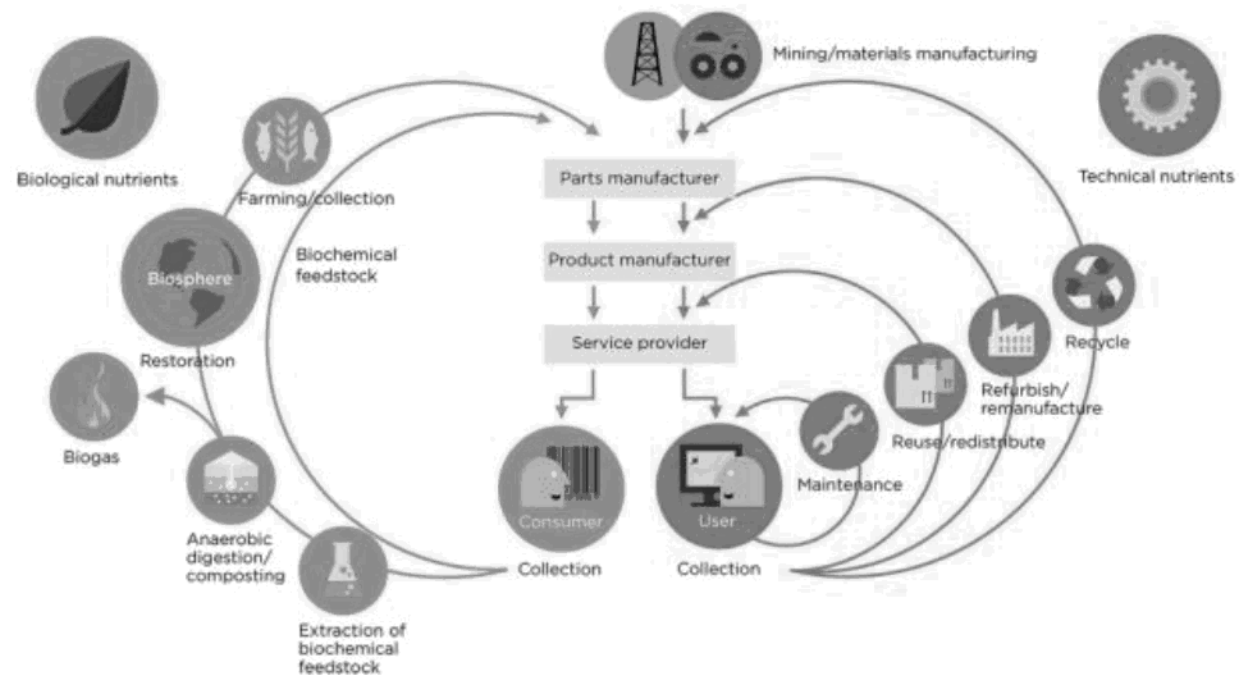
The World Economic Forum (WEF) estimates that \$25 trillion could be lost by 2050 unless the world changes its relationship between natural resources and markets. Over the past decade thousands of companies and entrepreneurs have explored innovations in recycling and repurposing of industrial waste, often finding value in those resources, assets and products that until now have been vastly undervalued or simply discarded. This modern Cradle to Cradle (C2C) approach has established the 'Circular Economy' and while this innovative thinking is rapidly gaining momentum, it is still very early in its evolution and more effort is needed to repurpose waste that is already being produced in some form or other.

In the industrial age well into the late 20th century, society became accustomed to abundant natural resources and inputs for industrial product development with little or no consideration of recycling. This was more acceptable while prices for inputs (especially raw natural resources) remained low and awareness of the impacts to the environment and social health were poorly understood. Today is dramatically different. Developed and developing nations have come to understand the tremendous stress to the environment, while prices for many of the inputs of industrial production, including labour, have skyrocketed in some cases or crashed in others, creating volatility if nothing else. As a result of these changes, prices for metals and other inputs have increased significantly into the present age. While today's generation is steadfastly focused on repairing the environmental damage of the past's linear model of 'take, make, waste' it has also produced distinct opportunities in waste and materials recycling.

This puts forth a strong business case for Lower Columbia to continue expanding the existing micro-cluster of industrial recycling businesses that includes Retrieval Technologies (battery recycling) and K-C Recycling Ltd, as well as Teck Trail Operations who have made a strong commitment over the past decade to recycling everything from plastic waste to electronic components.

As seen in Figure 6, the circular economy is substantially more than simple recycling and managing landfills. It includes biofuels, reducing wasted lifecycles of products that are discarded rather than refurbished and, as is already being done in Lower Columbia, finding uses for rejected materials. In other best practices around the world Caterpillar Inc saves considerable money and up to 90 per cent of energy use by remanufacturing millions of components, which generates profits

Figure 6 The Circular Economy



Source: Ellen MacArthur Foundation (2015)

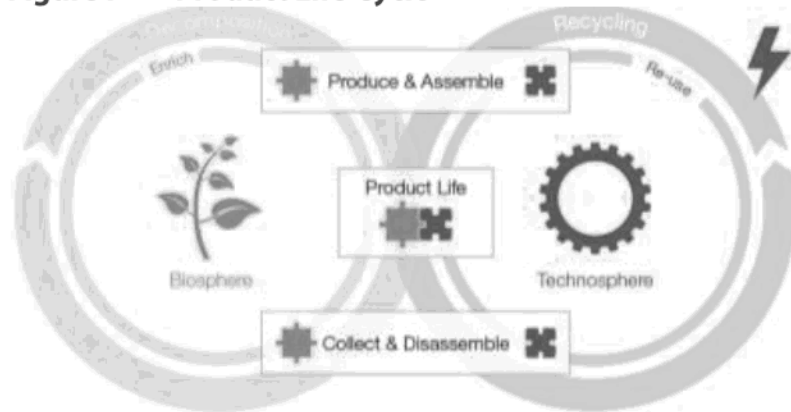
and employs more than 4,000.

To truly understand the extent of the circular economy and the advantages it proposes, a shift in mindset is required to produce a different model of thinking. For instance, the sharing economy is the perfect example of how the circular economy can work effectively. Uber takes advantage of the fact that the average car lies idle for 90 per cent of the day, meanwhile the average power drill is used for 30 minutes during its lifecycle providing the perfect opportunity for 'share sheds' and tool-share businesses.

This innovative thinking provides tremendous opportunity for smaller and more nimble entrepreneurs who can take advantage of the rich availability of by-products and waste products in the Lower Columbia region. A partial list already exists of these by-products and waste opportunities produced by Teck Trail operations and could be expanded. Business opportunities that can transform the supply chain are especially encouraged, particularly where they integrate material science, waste recycling, by-product repurposing, cloud computing and data analytics, or defy the traditional methodologies of linear production.

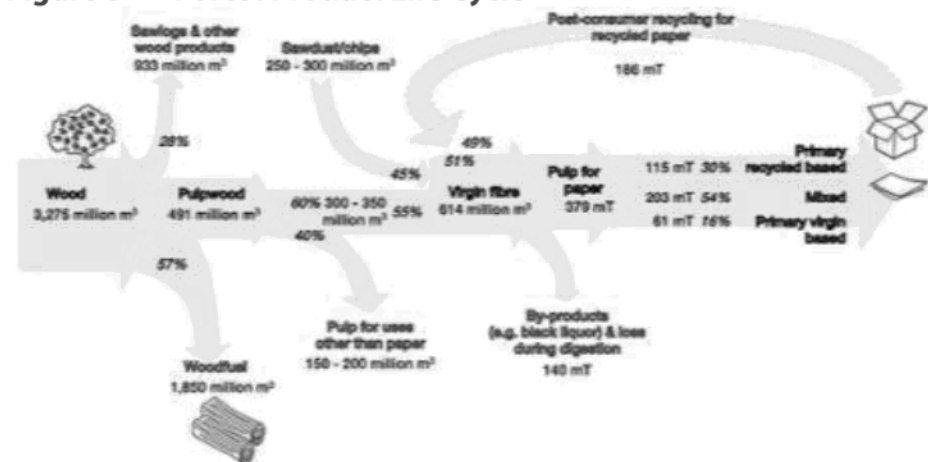
The Cradle to Cradle (C2C) framework has two main categories: technical and biological, and levers nature's 'biological metabolism' as a model for 'technical metabolism' flow of industrial materials. Most importantly the philosophy of C2C eliminates the concept of waste, shifting to the ideal that 'waste' equals 'food' for other purposes, whether biological or technical. The opportunity to expand the application of this approach in Lower Columbia is ideal.

Figure 7 Product Life Cycle



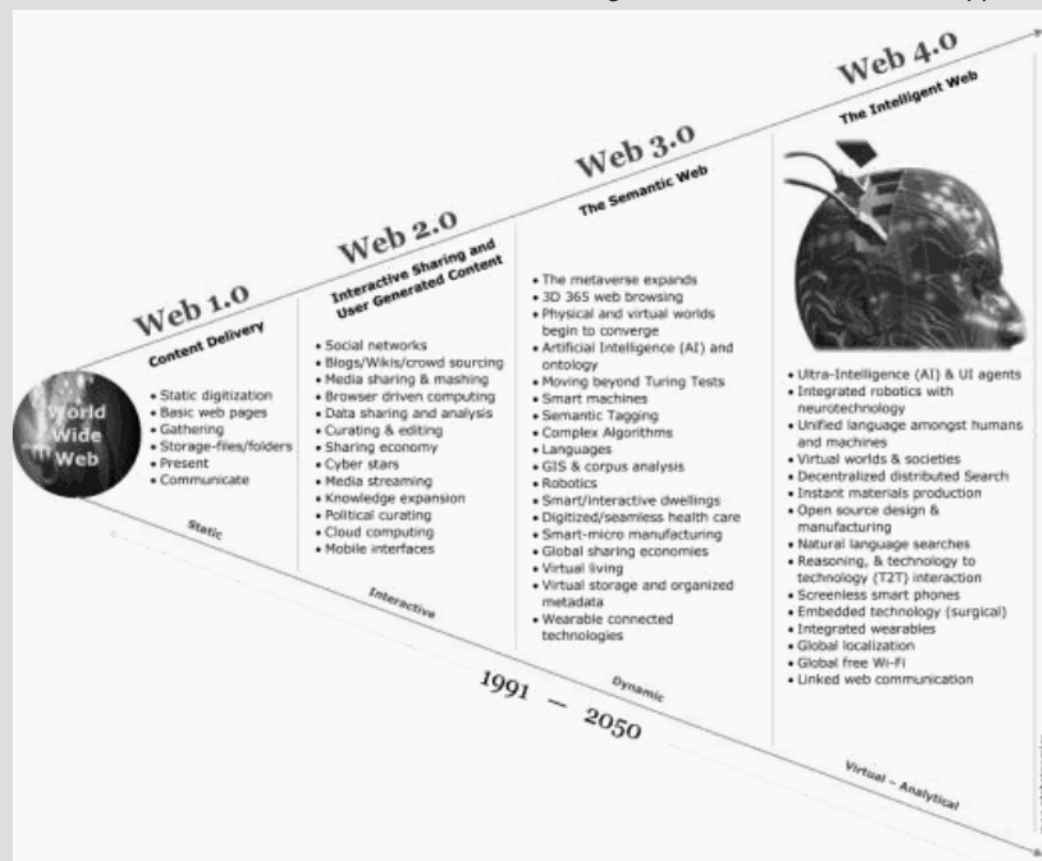
Source: Ellen MacArthur Foundation (2015)

Figure 8 Forest Product Life Cycle



Initiative: Promote innovation & technology strategy focusing on Web 2.0-4.0, tied to MIDAS/Fab Lab and co-led by local tech entrepreneurs

Rationale: There is a remarkable team of leaders in both the private and public sectors in Lower Columbia, and it appears there is a confluence of timing and opportunity combined with a powerful commitment to collaboration that can drive entrepreneurship and innovation in the region. In combination with the teams at KAST, CFDCGT, CBT and Selkirk College (to name a few) LCIC has an opportunity to support the expansion of the current approach to



promoting innovation to incubate entrepreneurs who's interests range in multiple disciplines and sectors from agrifood to multi-media and Web 2.0, 3.0 and even 4.0 as it emerges with new facets of its predicted Ultra-Intelligence agents and instant materials production.

There already exists a critical mass of entrepreneurs and innovators in the Lower Columbia region, as well as a concentration of services that support them sporadically through their various stages of growth from ideation to globalization. Evolving local incubation with a focus on acceleration is a natural next stage in the area's evolution of business and investment services.

Many studies on entrepreneurship have demonstrated that nurturing entrepreneurs by assisting with the exploration and growth of business opportunities is the number one most effective approach to getting enterprise rooted in the community for the long-term. (OECD 2015, Global Entrepreneurship Monitor 2014). Supporting them through later stages of growth is especially critical for Canadian companies who are often subject to poaching from foreign investment. Studies have also consistently demonstrated that start-ups launched at home where the proponent has family and support, have above-average success rates (Stillman 2014).

For Lower Columbia, supporting very early stage ideation and start up, including business management, are key

areas that could be strengthened with readiness boot camps, market research and mentorship. While area organizations like KAST and CFGT are ramping up support for these stages, LCIC could be working on the investment side to support venture capital opportunities from angel investment to VC's and finance. An active focus that drives investment from both local and non-local sources into key areas of global growth, especially ventures that connect to Web 3.0-4.0 and the circular economy is being recommended in this strategy. A particular opportunity here is to coopt local technology leaders in the development of a team approach to investment and capital attraction. Levering local investors to invest either directly or by promoting investment as champions will provide a powerful message for Lower Columbia.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> • Develop a virtual investment guide for Lower Columbia targeted to angel investors, VC's and other technology investors (public) that are looking to place capital. • Establish an outreach strategy with VC and investment communities in Western Canada, and other strategic regions (silicon valley) where possible. Vancouver has a thriving VC and startup community, and efforts to connect regularly with key leaders will help increase the profile of business opportunities in Lower Columbia. • Inviting business leaders and investors to pitch sessions, either in Lower Columbia or support local companies to participate in pitch sessions with major events like Banff Venture Forum, Vancouver Enterprise Forum, World Entrepreneur Forum, Canadian Financing Forum, CVCA, Vantec, Grow Conference, etc. 	<ul style="list-style-type: none"> • Increase awareness and deals volume for startup and early stage investment • Increase deal flow opportunity and exposure for local innovation • Support management of growth risk for scalable innovation and tech companies 	<ul style="list-style-type: none"> • ED Network • BCTIA • KAST • CFDCGT • CBT • BDC 	High		●	●

Initiative: Promote the Electric Highway and related opportunities (<http://www.bcclocalnews.com/community/322847661.html>)

Rationale: The shortfall of electric vehicles is their ability to support power along distance routes. The communities along Highway 3 from Princeton to Fernie have made commitments to install EV charging stations along the route as part of the Sun Country Highway Municipal Destination program that is touted as the World's Longest Greenest Highway Project. Besides the benefit of a decrease in air pollution from electric vehicles, the implications for both tourism and business traffic will add economic benefit for Lower Columbia, as well as signal that the communities along the route are taking a progressive leadership approach to business and the environment.

Leveraging both the perceived and real benefits of the green highway is an opportunity for LCIC as it promotes Lower Columbia as a destination for business and investment.



Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Develop a narrative around the Electric/Green Highway that supports LCIC's efforts to both differentiate and promote business in the region Work to support the establishment of related infrastructure associated with the green highway 	<ul style="list-style-type: none"> Promotion of the Lower Columbia as a conscientious leader on green transportation and environment Levers potential for related business 	<ul style="list-style-type: none"> Participating cities 	Medium		●	●

Content Marketing

Initiative: Update and expand marketing collateral




Rationale: LCIC can gain a marketing advantage by providing and maintaining clear and concise site-specific and regional information that anticipates the requirements of site selectors and business leaders making critical decisions on local investments. Timelines for investors to search out specific information is often tight and uncertainty or delays in clarifying any factors may lead to the choice of another location. Key information on variables such as labour, transportation, zoning and, utilities must be readily available and scaled to a specific opportunity in a format and through tools that are readily accessible and useable by potential clients.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Regional Profile – LCIC maintains a regional profile for the local area, with key data on the region and individual municipalities. The last update was in 2012. Make sure this document is updated regularly and prominently featured at the website. Explore the BC JTST site selector website investigating best practices and key site selector information to assure the Regional Profile remains an industry leader. 	<ul style="list-style-type: none"> Readily available and current data is available for the region that supports site selector information needs Promotes best practices in concise and professional presentation format 	<ul style="list-style-type: none"> BC MJTST 	High			
<ul style="list-style-type: none"> Community Profiles – LCIC presents BC Stats community fact sheets – consider reshaping the presentation and the scope of data with a more investment focus. For Community Profiles, be sure to link the LCIC website to the BC Investment and Trade communities website. This site has recently been updated and contains key indicators on each incorporated community in the RDKB. 	<ul style="list-style-type: none"> Readily available community level information Utilize partnerships 	<ul style="list-style-type: none"> BC MIT 	Flex			
<ul style="list-style-type: none"> Specific Opportunities Materials – LCIC already works with invest Kootenay and BC MJTST, utilizing their marketing websites to feature specific opportunities. This should continue, as well as working with services offered by BC MJTST to prepare land development Brochures. 	<ul style="list-style-type: none"> Having information available on specific information that is concise and professionally prepared Leverage provincial support 	<ul style="list-style-type: none"> BC MJTST 	High			

Initiative: Using digital media to connect and communicate the investment attraction message

Rationale: It is now common practice for site selectors and investors to use the web and social media to conduct research on a prospective area. It is important that the web tools available from the LCIC reflect best practices and focus on presenting target information that investors are looking for in a convenient and accessible format. In addition, social media tools are becoming more popular in building leads and connecting to potential investors.

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Maintain and update website information. LCIC already maintains a website that focuses on Investment, Work, and Visiting the area. Ensure periodic updates and pursue content to support the investment attraction activities. Data support – explore linkage to BC's Economic Atlas that provides map layer data on various information sources including major projects and infrastructure and transportation. Foreign Language Translation – verify the accuracy of the Google translation of the LCIC website for key languages including Chinese, Korean and Japanese. Explore business case for future development of web-based GIS capabilities. The integration of the Content Management System with GIS platforms such as ERSI's, ArcGIS, and consumer products such as Google Maps and Microsoft Bing Maps would create dynamic search and site location tools for LCIC. RDI has created a GIS mapping tool, which upon further refinement may be ideal for local use. 	<ul style="list-style-type: none"> Accurate and up-to-date investment information Platform to host key supporting materials for potential investors 	<ul style="list-style-type: none"> Municipalities RDKB Invest Kootenay 	High	●	●	●
	<ul style="list-style-type: none"> Communications in a language understood by target investor 		Flex			
	<ul style="list-style-type: none"> Better access to local information 	<ul style="list-style-type: none"> Invest Kootenay RDI BC MJST 	Low		●	

<ul style="list-style-type: none"> • Social Media – social media tools like Facebook, Twitter, LinkedIn, and YouTube managed hand-in-hand with the website can be used to get information out, support branding, and engage partners, contacts and prospects. LCIC is already active with these social media tools but should explore how best practices can be used to maximize the use of these tools to support investment attraction. 	<ul style="list-style-type: none"> • Expanding the reach of LCIC to potential investors 	<ul style="list-style-type: none"> • Invest Kootenay 	Moderate			
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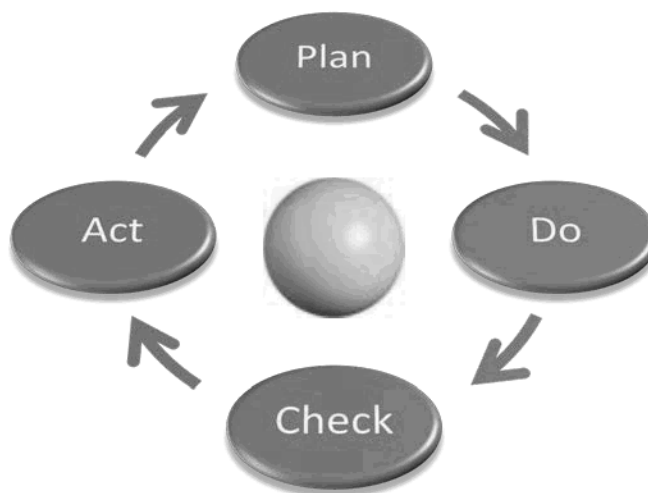
Monitoring and Evaluation

Initiative: Monitor FDI initiatives, evaluate effectiveness and report out to supporting organizations and key partners

Rationale: Formalizing monitoring and evaluation procedures by defining expected outcomes and their associated measures results in a shared language that LCIC can use to communicate performance. The underlying question to be answered is “Are FDI efforts making a difference, and if so, in what way?” The indicators and data used should lead to good decisions about what activities and programs are best for the region and its communities. At the same time, they should be useable by staff and board members to assist with broader communications and marketing activities. A summary of objectives and measures is provided below.

Objectives/Outcomes	Measures
<ul style="list-style-type: none"> • Improved organizational performance • Up-to-date and best practice availability of regional economic information • Improved business climate • Integrated BRE + Attraction programs • Improved local business networking • Expanded trade and export activity • Standardized response to enquiries • Increased awareness of the Lower Columbia • Increased investment enquiries • Increased investment activity • Expansion and strengthening of the regional supply chain • Personalized aftercare • Enhanced land development in downtown and waterfront Trail • Expanded metallurgical opportunities linked to MIDAS • Development of the circular and recycling economy • Greater capacity for innovation and start-up support 	<ul style="list-style-type: none"> • # of outreach visits (by type, size, sector) • # total value of businesses visited including taxes • # of businesses assisted and the outcomes • value of outcomes (expansion) • # of jobs created • value of jobs and payroll • value of programs/partners engaged • # of inquiries (by type, nature, sector and region) • # prospects in the pipeline • # of businesses formed/established • market value of businesses connected with

Actions	Objectives	Partners	Priority Level	Timelines		
				2015-16	2017-18	2019-20
<ul style="list-style-type: none"> Identify sources of for the objectives outlined in this plan. <ul style="list-style-type: none"> Outputs such as clients served, investment attracted, website visits, program uptake and the like can be measured through internal tracking, using ExecutivePulse. Outcomes, which are measures of additionality, for example employment and income levels, can be tracked using published data from statistical agencies. Establish a quarterly reporting period, with annual report summaries that compare year-over-year. Exceptions can be made in the case of special projects. 	<ul style="list-style-type: none"> Standardized monitoring, evaluation and reporting framework 	<ul style="list-style-type: none"> LCCDTS 	High	●	●	●



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BDC	Business Development Bank
CBRDI	Columbia Basin Rural Development Institute
CBT	Columbia Basin Trust
CFGT	Community Futures of Greater Trail
CTCS	Canadian Trade Commissioner Service
DFATD	Department of Foreign Affairs, Trade and Development
FDI	Foreign Direct Investment
FTZ	Foreign Trade Zones
IFC	International Finance Corporation
IMF	International Monetary Fund
LCCDTS	Lower Columbia Community Development Team Society
LCIC	Lower Columbia Initiatives Corporation
MCSCD	Ministry of Community, Sport and Cultural Development
MIDAS	Metallurgical Industrial Development Acceleration and Studies
MIT	Ministry of Investment and Trade
MJTST	Ministry of Jobs, Tourism and Skills Training
OECD	Organisation for Economic Cooperation and Development
RDKB	Regional District of Kootenay Boundary
TCC	Trail and District Chamber of Commerce
UNCTAD	United Nations Conference on Trade and Development

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1.0 THE OFFICIAL COMMUNITY PLAN

1.1 What is it?

Community Plans are used as a policy tool by local governments for land use planning. Community Plans provide certainty regarding the location and nature of community change to residents and land owners, and serve to guide Municipal Councils when making decisions about development, zoning, and services to accommodate growth. Community Plans can improve local commercial, industrial and residential areas, and provide the assurance neighbourhoods need to retain attractive and stable living environments. The Plan can also set out policies relating to social needs and development, as well as policies relating to the natural environment. The policies of a Community Plan assist in guiding the decisions of the business and development interests of the community. Community Plans should reflect a consensus of public opinion, which is utilized as a framework for future development. Community Plans also contain strategies for managing future growth.

Official Community Plans (OCP) are prepared and adopted within the statutory provisions of the Local Government Act. The Local Government Act prescribes the general content of the Official Community Plans and sets out the process for adopting a Plan.

1.2 What is the purpose of the Official Community Plan

The Official Community Plan provides objectives and policies for the community of Trail. As a policy document, it sets out a land-use management strategy for Trail's growth.

The OCP is based on the resources and capabilities of the City of Trail. The Plan aims to meet the requirements, needs and aspirations of Trail's residents for the foreseeable future.

The Plan delineates Policy by which Trail City Council and the public can evaluate development proposals to ensure manageable economic change and growth. The Plan forms the basis for land use bylaws and capital expenditures, and is to be consistent with any applicable waste management plans and financial plans.

The Plan should be updated periodically to ensure that the document continues to reflect the long-range planning objectives of the Community.

1.3 What can a plan do?

The Local Government Act outlines that an Official Community Plan can contain objectives, policies, statements and material the City considers appropriate, as well as specific designations for various types of areas. The Plan must be flexible and adaptive to changes in the community. A reasonable planning horizon is 5 years in the short term and 15 to 20 years for longer-term considerations.

The main purpose of the OCP is to provide a degree of certainty to Council and residents regarding the form and character of the community. The Plan can encourage senior levels of government to take action, but it cannot force action. The OCP does not commit Council to specific expenditures; but all bylaws and works must be consistent with the Plan.

The Plan reflects community values that have been determined through input from Council and the general public. The OCP can achieve consensus; yet for some issues, the Official Community Plan represents a compromise between opposing viewpoints.

1.4 What is the structure of the plan?

This Official Community Plan consists of two different components: one component contains the force and effect of the Bylaw; the other component is provided for information and convenience only.

The sections that have the force and effect of the Bylaw are as follows:

- Plan Goals
- Guiding Principles
- Policies
- Land Use Map Designations
- Development Permit Areas
- Implementation
- Figures and Schedules

The sections that are provided only for information and convenience are as follows:

- The Official Community Plan
- The Planning Process
- The Existing Situation
- The Vision sections in Section 6
- Background

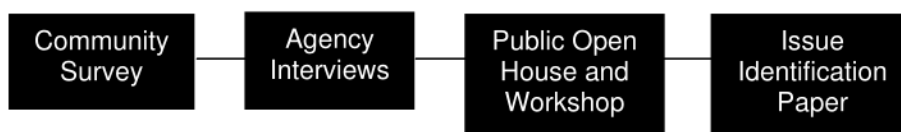
2.0 THE PLANNING PROCESS

This Plan was prepared with extensive public input through a community survey and a number of public workshops. The plan also considered input from more than twenty agencies, organizations and groups within the community as well as input from staff and consultants. The process illustrated below has enabled Council to consider a wide range of sources in identifying appropriate policies for the plan.

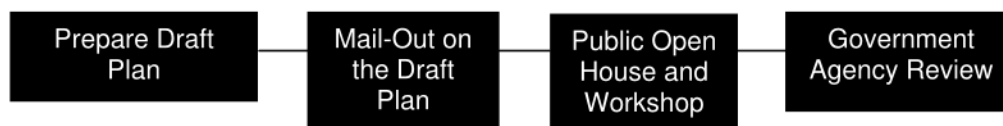
Background Research and Data Analysis



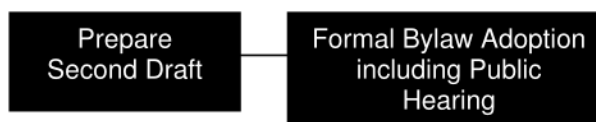
Identifying and Discussing the Issues



Prepare Draft Plan



Prepare Final Plan



3.0 THE EXISTING SITUATION

Incorporated in 1901, the City of Trail has evolved over time to become the regional centre for the Greater Trail area. The City of Trail functions as the commercial, recreational, institutional and educational 'heart' of the surrounding area. Downtown Trail provides a generous mix of office, retail and institutional uses to accommodate the daily service needs and demands of Trail residents.



3.1 Key Features

Employing approximately 1,800 people, Cominco Ltd. is the region's largest employer. Cominco has historically been and continues to make significant contributions to the community. As a result of Cominco's commitment to the community, the City of Trail provides superior recreational facilities including the Trail Memorial Centre and the recently completed Trail Aquatic Centre.

The City of Trail is also home to the largest diagnostic, and acute care hospital in the West Kootenay Region. The Trail Regional Hospital provides health care services to local patients and patients referred from outside the local community.

With the mighty Columbia River flowing through the centre of the City, and the surrounding mountainous terrain, residents are often reminded of the area's natural beauty. Unfortunately, the tremendous potential of these characteristics have not been fully explored or realized. Conversely, the dramatic river and mountain setting has been a challenge to the development of the City. With limited space between opposing walls of the Columbia River Valley, the City has been forced to develop linearly, stretching almost 10 kilometres from Waneta to Sunningdale. Servicing this pattern of urban development will continue to be a challenge for the City of Trail.

3.2 Demographics

In 1996 the City of Trail had a population of 7,979. By 1999 the population of the City had fallen by an estimated 353 people or 4%. This fall in population is directly related to a declining work force. Between 1991 and 1996 the number of persons employed within Trail decreased by 220 persons. Of those 220 jobs lost, 195 of them were in the Statistics Canada category titled *mining, quarrying and oil well industries*. This reduction can be partly attributed to the modernisation of the Cominco smelter.

The City of Trail is a single family residential oriented community with few forms of multi-family residential development. In 1996, 77% of the housing stock in Trail consisted of single family residential dwellings and semi detached (e.g. duplex) dwellings. Conversely, in the same year, 59% of the housing stock across the province consisted of single family residential dwellings and semi detached dwellings, a difference of 18 percentage points. As the population ages in Trail, the preferred housing choice may shift from a single family dwelling to a townhouse or apartment where the proximity to services and the amount of space to maintain generally decreases. Sufficient land must be designated for higher density development should this shift take place.

The average age of an employee at Cominco's Trail operation is 47. It is anticipated that within 15 years Cominco's Trail operation will have a completely new and different labour force. A younger and perhaps more technical labour force will likely replace those that are retiring. This situation will have a profound effect on the supply and demand of residential dwellings within the City of Trail. The Official Community Plan must contemplate the needs of both the new and retiring labour force to ensure that adequate serviced land is available within Trail to accommodate these families.



Responses to the Official Community Plan survey indicate a desire to improve the aesthetic appearance of the City. Improving the image of the City can often be a catalyst for economic development. In this global environment, a community that is visually attractive, has affordable housing choices, superior education facilities, significant recreational opportunities, and an accessible labour force will succeed in attracting quality business and industry to the area.

Trail can be that place.

4.0

PLAN GOALS

As a result of the knowledge gained through public consultation, planning analysis and research, a proactive Official Community Plan is needed to guide the community into the next Century.

The goals of the Official Community Plan are to:

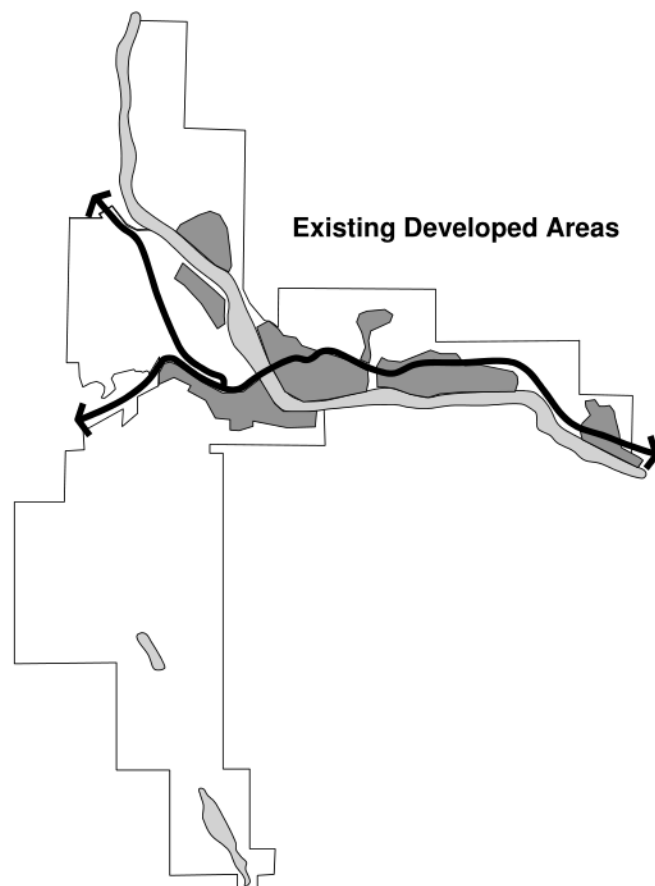
- Facilitate **POSITIVE CHANGE** within Trail;
- Encourage **REINVESTMENT** within Trail;
- **RENEW** a strong sense of **COMMUNITY PRIDE**;
- Preserve our **HERITAGE** while pursuing a **BRIGHT FUTURE**;
- Enhance the existing **CHARACTER** of the City; and
- Create an **IMAGE** for the City that goes beyond the smoke stacks.

5.0 GUIDING PRINCIPLES

The Official Community Plan's guiding principles were drafted in response to the major issues raised through community input. The guiding principles can be viewed as the general philosophy behind Official Community Plan policy. The principles provide the broad context in which to make appropriate land use decisions.

1. CONCENTRATE DEVELOPMENT WITHIN EXISTING URBANIZED AREAS

The City of Trail is constrained by the surrounding mountainous landscape and the Columbia River. As a result, few vacant areas within the existing municipal boundaries exist for future urban development. Land within the existing municipal boundaries must be used more efficiently to accommodate future growth. This can be accomplished by slightly increasing residential densities, permitting taller commercial buildings and by encouraging mixed use residential and commercial development (e.g. apartment units above commercial businesses downtown).



2. REVITALIZE TRAIL'S COMMERCIAL AREAS

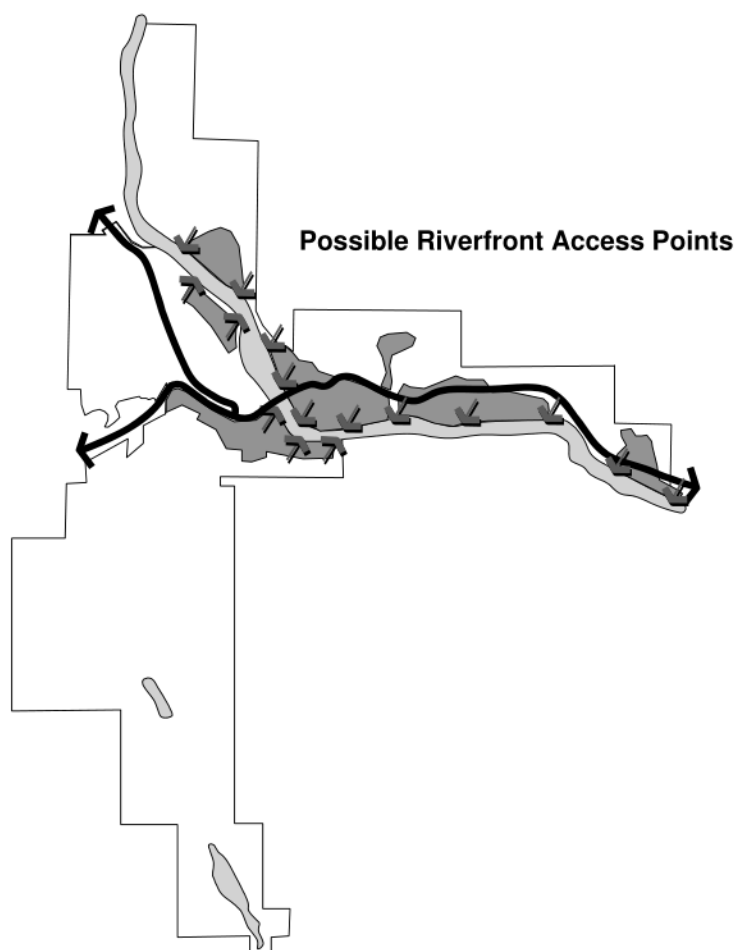
The commercial areas in Trail lack the energy, activity and variety necessary to create vibrant commercial places. Commercial areas need to be more than just commercial areas to be successful. They need to be places that provide recreation, entertainment, intellectual and visual stimulation and facilitate socialization. The commercial areas in Trail have the ability to become these places with a little encouragement. Encouragement may take the form of commercial revitalization, street tree planting, trail construction, plaza creation, façade improvement and mixed use development.

3. INTEGRATE NEW FORMS OF HOUSING INTO EXISTING AREAS

It is estimated that within the next 10 to 15 years, the entire labour force at Cominco Ltd. will turn over. This process will significantly influence the housing market within the City of Trail. Recent trends indicate that the majority of Cominco retirees are choosing to remain in Trail. Alternative types of housing may be required to meet the needs of this aging segment of the City's population. Alternatively the new Cominco workforce will be younger and will likely demand a different form of housing. The OCP must provide City staff and Council with appropriate policy that will anticipate and respond to these changes within the City's housing market.

4. IMPROVE THE RELATIONSHIP BETWEEN THE COLUMBIA RIVER & THE UPLAND AREAS

The Columbia River has historically been underutilized as a community feature. However, as water quality in the Columbia River has improved, so has the recognition of its value and potential. The Official Community Plan will attempt to enhance the importance of the Columbia River by encouraging additional access and lookout opportunities. In addition the Plan will attempt to capitalize on the beauty of the Columbia River by encouraging slightly higher forms of density adjacent to its banks in strategic locations. The Plan will also improve the relationship between the downtown and the River by encouraging appropriate commercial uses along the riverfront.



5. ENCOURAGE REDEVELOPMENT AND REINVESTMENT IN WEST TRAIL

West Trail was initially constructed to accommodate early Cominco workers. Unfortunately over the years, infrastructure and properties in the area have deteriorated to a point of concern. The OCP will look at various options to encourage redevelopment and improve the access and parking situation in the area. The OCP will identify suitable forms of housing that may revitalize the area without comprising its unique character.

6. EMPHASIZE THE ENTRANCES TO THE CITY

The City of Trail has three primary vehicular entrances into the community including: Highway 3B through Rossland Avenue in the Gulch; Highway 22 from Castlegar; and Highway 3B and 22A at Waneta Junction. The three entrances provide an important introduction to the community for tourists. The entrances are also important locally because they help shape how the community feels about itself. For these reasons the OCP will consider policies to encourage entrances that not only welcome the tourist but also foster a sense of community pride.



7. EXPLORE OPPORTUNITIES FOR NEW RESIDENTIAL DEVELOPMENT

The City of Trail is land starved. Much of the land available within the boundaries of the City is constrained by steep slopes or unstable soils. As a result, few vacant areas remain ripe for traditional single family residential development. The OCP will identify possible development opportunities within the boundaries of the City. This inventory will help determine if additional land outside the boundaries of the City is needed to accommodate future residential growth.

8. IDENTIFY ADDITIONAL PEDESTRIAN ROUTES AND FACILITIES

Walking, cycling, rollerblading, skateboarding have all become popular pastimes in communities around the world. The City of Trail is no different. A number of trails or paths have been successfully created within the City in recent years. The OCP will maintain this momentum by identifying additional pedestrian trail opportunities within the boundaries of Trail. Ensuring linkages are made with existing and proposed trail systems outside the City boundary will also be important. Pedestrian facilities such as benches, lookout stations and washrooms will also be considered.



9. HIGHLIGHT VIOLIN LAKE AS A RECREATION AND TOURIST AREA

The Community Survey results reinforced the recommendations of the *Violin Lake Best Use Study* by suggesting that the area be retained by the City and developed for passive recreation. The OCP will translate the community's desire into appropriate policy that promotes the recreational opportunities of the area without sacrificing its natural character. The opportunities that Violin Lake could present locally and to the region could help the City of Trail shake the "smelter town" image and become more attractive to the tourist.



10. FACILITATE IMPROVED VEHICULAR LINKAGES THROUGHOUT THE COMMUNITY

The City of Trail is bisected by Highway 3B/22. With major changes to the road system south of the border, this highway could become the major north-south route for truck trade. The City of Trail needs to ensure that policies are in place within the OCP to preserve road corridors for future upgrades. In addition a number of local transportation issues may require clarification through the OCP.

11. CREATE A CIVIC INSTITUTIONAL PRECINCT IN THE DOWNTOWN

The City of Trail contains a number of significant civic and cultural facilities including the Visac Gallery, Selkirk College, the Greater Trail Community Centre, the City Hall, and museum. A number of these facilities are currently in need of additional space. This presents a unique opportunity for the City of Trail to consider the construction of a multi-purpose civic/institutional complex within the downtown. Creating a civic/institutional precinct could be the spark the downtown needs to encourage redevelopment and revitalization.

12. EXPLORE ADDITIONAL ECONOMIC DEVELOPMENT OPPORTUNITIES

Respondents to the community survey indicated that economic development should be a top priority within the City of Trail. The OCP will facilitate economic development by ensuring that adequate land is available within the municipal boundaries for commercial and industrial development. In addition, the OCP will continue to support land use policy that indirectly results in economic development including education, tourism and recreation.

13. REDUCE COMMUNITY GREENHOUSE GAS EMISSIONS

The City of Trail, in support of the Provincial commitment to reduce greenhouse gas emissions, will encourage projects and development that aim for carbon neutrality and demonstrate new energy efficient technologies with the objective of meeting a greenhouse gas reduction target of 33% below Trail's 2007 greenhouse gas emissions' levels by 2020.

6.0 NEIGHBOURHOOD AREAS

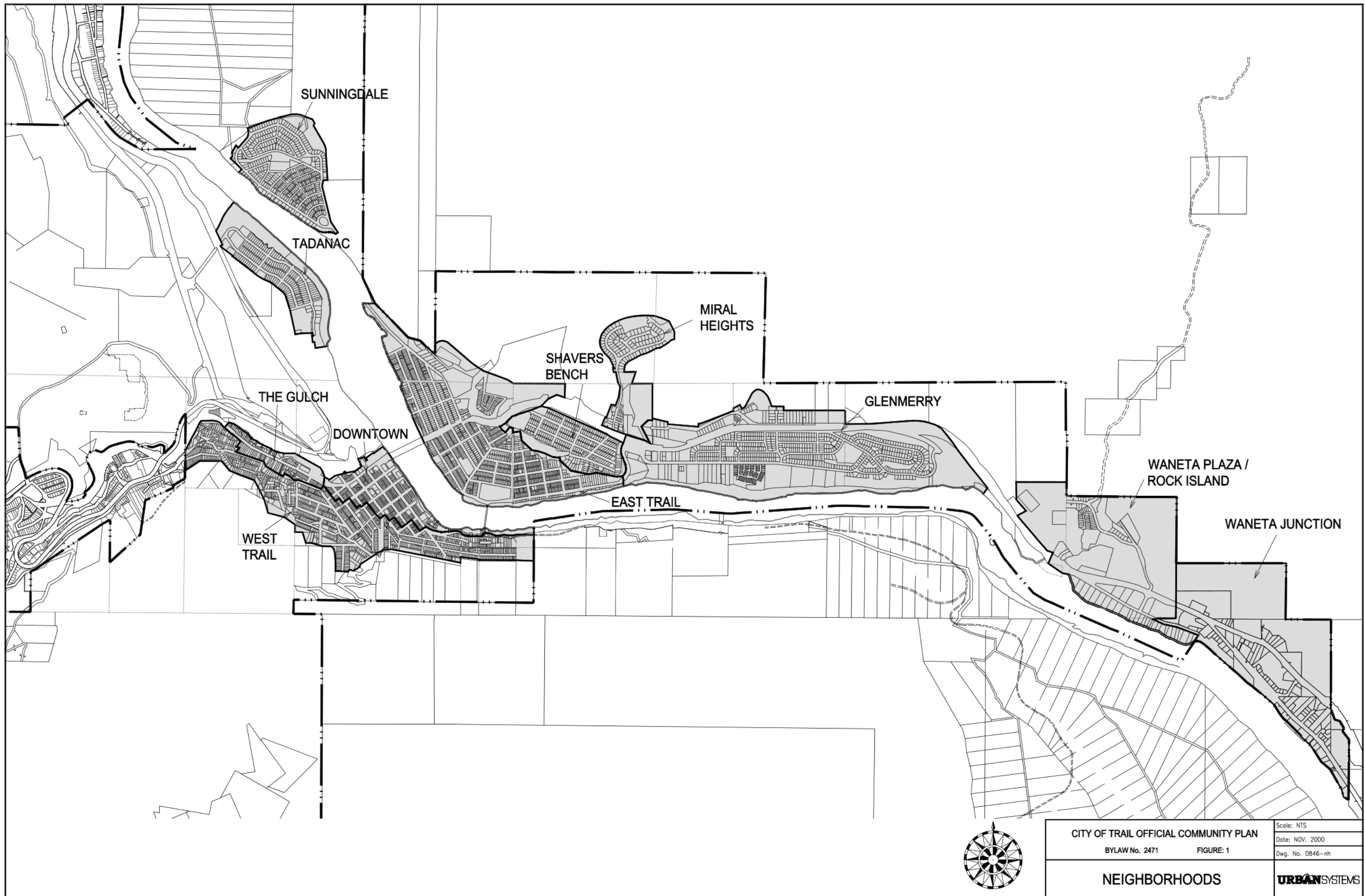
The City of Trail is blessed with eleven unique neighbourhoods that provide the variety in character, affordability, and housing options demanded by its residents.

- The Gulch;
- West Trail;
- The Downtown;
- Tadanac;
- Sunningdale;
- East Trail;
- Glenmerry;
- Shavers Bench;
- Miral Heights;
- Waneta Plaza/Rock Island;
- Waneta Junction.

Those searching for housing in Trail have access to a variety of housing choices. Options range from the large lot heritage home in Tadanac to the small lot hillside home in West Trail, to the apartment in the downtown, to the single storey duplex in Waneta, to the newly constructed Miral Heights.

The Official Community Plan recognizes the unique qualities of each neighbourhood. The intent of the plan is to set policy in place to reinforce the qualities that make each neighbourhood unique.

The location of each neighbourhood is illustrated on Figure 1.



6.1

the gulch

6.1.1 The Vision

The Gulch area provides an important visual and physical entrance into the City of Trail. This area not only provides an important “first impression” for tourists but it also helps shape Trail’s image of itself. Unfortunately, the historical importance of the area has been diminished over the years as a result of urban decay.

Respondents to the Official Community Plan survey indicated a desire to revitalize the heritage of the Gulch for tourism purposes. They said that policies in the OCP should encourage redevelopment that respects the area’s heritage, contributes to the life of the street and presents a positive entrance into the community.



6.1.2 How will we achieve the vision?

This section describes the broader vision for the Gulch neighbourhood. For policies pertaining to specific land use designations permitted in the Gulch neighbourhood, please refer to section 7.0.

Council’s policies are as follows:

- .1 Support multi-family residential, institutional, commercial and parks and recreational land uses within the Gulch Area as illustrated on the Land Use Map.
- .2 Discourage automobile oriented businesses such as gasoline service stations, fast food outlets and car dealerships along Rossland Avenue.
- .3 Support redevelopment along Rossland Avenue that respects the architectural history of the area.
- .4 Revive the character of the Gulch by preserving existing heritage buildings in the area.
- .5 Support development along Rossland Avenue that provides an appropriate pedestrian scale and contributes to the pedestrian environment.
- .6 Encourage commercial and residential mixed-use development within the Gulch provided that:
 - Residential is located on the upper floors, saving the ground level for commercial uses;
 - Commercial uses contribute to the life and visual quality of the street. This can be accomplished by creating street level entrances and building facades that encourage window shopping and engage the pedestrian.

- .7 Support the reuse of existing single family residential buildings in the Gulch for commercial, multi-family residential and institutional land uses.
- .8 Work with the property owners, businesses and the community to prepare an Enhancement Strategy aimed at improving the appearance of the Gulch as an important entrance to the City of Trail. For a detailed description of the Strategy, please refer to section 11.0 Community Enhancement.
- .9 Work with property owners, businesses and the community to identify and pursue opportunities for cultural and heritage tourism in the area.
- .10 Proactively work with business to attract appropriate land uses to the area.

6.2

west trail

6.2.1 The Vision

West Trail has a design and character unique to the City of Trail and surrounding region. This hillside neighbourhood accommodates primarily small single family homes on small lots. West Trail boasts dramatic panoramic views of the Columbia River Valley including views of the urban areas of Sunningdale, East Trail and Glenmerry. West Trail is located within walking distance of the services and amenities offered in both Downtown and the Gulch.



Unfortunately, deteriorating homes in West Trail have negatively contributed to the image of the neighbourhood. The steady decline in housing quality in some areas of West Trail has directly influenced housing prices in the area. Some older homes are currently being renovated. Full redevelopment may take place if house prices continue to drop to a value that makes demolition and redevelopment financially possible. It is important that revitalization be encouraged without compromising the unique character and charm of the existing single family homes in the area.

The City of Trail will encourage public and private reinvestment in West Trail by placing a renewed importance on maintaining area infrastructure including parks, lighting, sidewalks and roads. The City will also explore opportunities for lot consolidation in appropriate areas to facilitate efficient redevelopment of the land.

6.2.2 How will we achieve the Vision?

This section describes the broader vision for the West Trail neighbourhood. For policies pertaining to specific land use designations permitted in the West Trail neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, institutional and parks and recreational land uses within the West Trail Area as illustrated on the Land Use Map.
- .2 Explore opportunities to purchase strategic properties to construct common parking areas to reduce existing parking congestion and facilitate improved snow clearing and traffic movement;
- .3 Identify, construct and maintain important pedestrian links to the Downtown and the Gulch Commercial areas. Ensuring direct accessibility to the services of the Downtown, the Gulch and the riverfront is important to encourage reinvestment in West Trail.

- .4 Identify areas in the neighbourhood that are more suitable for lot consolidation and complete redevelopment. Evaluation criteria may include:
- Accessibility to vehicular, public transit and pedestrian transportation linkages;
 - View opportunities;
 - Availability of onsite and onstreet parking;
 - Opportunities or constraints associated with site topography; and
 - Relative proximity to the Downtown and Gulch commercial areas.
- .5 Work with the neighbourhood to consider appropriate upgrades to neighbourhood parks in West Trail. Improvements may take the form of additional lighting, improved park maintenance, playground equipment and others. Council will explore partnership opportunities with the neighbourhood to offset construction and maintenance costs.
- .6 Work with neighbourhood property owners and the community to prepare an Enhancement Strategy aimed at enhancing the character and improving the appearance of West Trail. For a detailed description of the Strategy, please refer to section 11.0 Community Enhancement.
- .7 Encourage development within West Trail that reflects the unique small-scale single family character of the area.
- .8 Permit multi-family residential land uses in West Trail, subject to zoning, with consideration of the following guidelines:
- Is the size and scale of the proposed multiple family use compatible with the single-family character of the neighbourhood?
 - How accessible is the site to vehicular, public transit and pedestrian transportation linkages?
 - Is the required parking accommodated efficiently on site? Multi-family residential developments will be encouraged to take advantage of the sloping hillside and maximize the building site by placing parking underground.
 - Will the project create undue stress on the existing road system?
- .9 Respect the views available from adjacent residents in West Trail wherever possible.
- .10 Recognize that West Trail supplies a significant portion of the affordable housing stock in the City.
- .11 Upgrade the underground service infrastructure as required in West Trail. The City will consider enhancement efforts such as tree planting and sidewalk construction in conjunction with underground service upgrade projects wherever possible.



.12 Explore opportunities to improve the flow of traffic through West Trail. Issues to consider include:

- alternative transportation routes;
- appropriate road standards in West Trail;
- provision of common public parking areas; and
- quality of road infrastructure.

.13 Work with the neighbourhood to prioritize redevelopment opportunities in a logical phased approach. The appropriateness of public reinvestment projects will be evaluated based on responses to the following set of criteria:

- Does the project build on the momentum established by an adjacent redevelopment project?
- Can the cost be recovered?
- Can the project be linked to another project (e.g. infrastructure upgrade)?
- Does the project improve accessibility to the Downtown or the Gulch?
- Will the project increase neighbourhood pride?
- Does the project provide a measurable benefit to the neighbourhood?
- Does the project provide a measurable benefit to the community as a whole?

6.3

the downtown

6.3.1 The Vision

Downtown Trail is the business and retail heart of the City and the region. Downtown provides a good mix of major office, retail and institutional uses. However, Downtown Trail has yet to maximize its potential as the cultural and civic heart of the City. The Downtown already contains the key ingredients to realize this potential. Uses such as Selkirk College, the Visac Gallery, the Trail and District Community Theatre, the Royal movie theatre, the library, the Trail Memorial Centre and City Hall all contribute to the cultural and civic character of the City. However, many of these uses are visibly hidden from the street and therefore do not have a strong presence in the Downtown. Many of these uses need to be unveiled, advertised and open in the evening in order to attract residents of the City and tourists to the area.



Downtown Trail needs to become the place to be rather than a place to leave after 5 pm. To this end the Official Community Plan will support land uses that provide additional reasons to be Downtown. Examples include additional residential development, recreational activity, open space, trails and park areas, and informal meeting places to name a few. Downtown Trail has tremendous potential to capitalize on its close proximity to the Columbia River. The Official Community Plan supports riverfront trail development, improved river access, view points and other ideas and concepts that can more effectively link Downtown Trail to the Columbia River.

6.3.2 How will we achieve the Vision?

This section describes the broader vision for the Downtown neighbourhood. Creating a people place is an important part of that vision. In order to accomplish this goal, this section describes policies that encourage mixed-use development, parks and plazas, trail systems and others. For policies pertaining to specific land use designations permitted in the Downtown neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Accommodate a variety of land uses within the Downtown neighbourhood including commercial, residential, institutional and parks and recreation, to help create a vibrant, active, pedestrian district that attracts residents and visitors alike.
- .2 Encourage land uses within the downtown that help to generate pedestrian activity beyond normal business hours. Examples might include additional restaurants, cafes, cultural facilities, events, trail systems, recreational opportunities and others.

- .3 Create a pedestrian friendly Downtown by:
- Constructing safe, well lit and efficiently maintained pedestrian linkages to adjacent neighbourhoods, the Columbia River and the riverfront walkway and park;
 - Designing and constructing appropriate weather protection devices for pedestrians at bus stops and other high-traffic pedestrian areas;
 - Improving accessibility on public and private property for all members of the community;
 - Constructing appropriate pedestrian facilities including public washrooms, benches, bike racks, view points and fishing areas in easily accessible and visible locations;
- .4 Build on the existing strengths of Downtown including Selkirk College, the Visac Gallery, the Trail and District Community Theatre, the Royal movie theatre, the Trail Memorial Centre, existing motels, the proximity to the Columbia River, and the existing retail sector.
- .5 Work with the property owners, businesses and the community to prepare a Community Enhancement Strategy to improve the appearance and character of the Downtown in an effort to facilitate economic development in the area. For a detailed description of the Strategy, please refer to section 11.0 Community Enhancement.
- .6 Work with the Chamber of Commerce to attract new business to Downtown Trail.
- .7 Encourage the creation of a civic precinct within Downtown that makes efficient use of land and available resources and is a pedestrian activity generator in the Downtown. For a detailed description of the civic precinct, please refer to section 7.4 Institutional.
- .8 Work with user groups and the community to identify ways to further enhance the use of the Trail Memorial Centre. Efforts should be directed to take advantage of the highway frontage and the space available within the Trail Memorial Centre to accommodate ancillary uses that positively contribute to the Downtown and the community as a whole. Uses to consider may include convention facilities, recreation opportunities, meeting areas, retail space, museums and others.
- .9 Facilitate compact urban form by encouraging buildings to develop adjacent to the front property line except where a plaza or courtyard is being constructed. On site parking will be encouraged to locate behind or underneath the building.
- .10 Consider partnering with the private sector to construct a multi-level, multi-use parkade in the vicinity of Selkirk College. This parkade could help alleviate existing parking concerns at Selkirk College and accommodate additional vehicles to meet the demands of downtown businesses, institutions and recreational facilities.
- .11 Support built form that is of high quality and respects the unique heritage and character of the City of Trail as suggested in the *City of Trail Building Design Guidelines*.



.12 Improve the Esplanade Trail system through Downtown by:

- widening and resurfacing the pathway;
- considering softer landscaping techniques;
- removing structures that inhibit access or enjoyment of the trail system;
- creating appropriate directional and informative signage;
- constructing staging areas for parking and seating;

.13 Facilitate a stronger relationship between the Columbia River and Downtown by:

- improving access to the river;
- constructing river viewing areas and fishing ledges in Downtown; and
- encouraging businesses to front the river taking advantage of river views;
- constructing see-through railing to improve the visual access to the river;
- exploring additional riverfront activities such as riverfront trails, marinas, piers, parks and rest areas;

6.4

east trail

6.4.1 The Vision

East Trail accommodates a wide variety of land uses ranging from single family residential to service commercial. East Trail has many positive characteristics including its relatively level topography, proximity to the Columbia River and accessibility to various amenities and services including schools and recreation facilities. This area is attractive for both young and old. The existing housing stock within East Trail is aging.



Slightly higher density forms of residential development will be encouraged in East Trail to take advantage of its relatively flat topography, easy access and close proximity to available amenities, services and recreational opportunities. Permitted densities will increase as the distance decreases to the East Trail Commercial area and the Columbia River. The East Trail commercial area will continue to accommodate small-scale neighbourhood office and retail businesses to cater to the daily needs of area residents. Service commercial or industrial activities will be encouraged to relocate outside of East Trail to Highway Drive or Waneta.

6.4.2 How will we achieve the Vision?

This section describes the broader vision for the East Trail neighbourhood. For policies pertaining to specific land use designations permitted in the East Trail neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Accommodate a variety of land uses within the East Trail neighbourhood including commercial, residential, institutional and parks and recreation, to help create a vibrant, active, pedestrian district that attracts residents and visitors alike.
- .2 Encourage the retention and development of a full range of residential types, densities, tenures and prices to accommodate various age groups and household compositions.
- .3 Direct higher density forms of development to areas within East Trail designated East Trail Mixed Residential, Commercial, Transition Area and Multiple Residential.
- .4 Encourage seniors housing in areas within East Trail designated East Trail Mixed Residential, Commercial, Transition Area and Multiple Residential as indicated on the Land Use Map.
- .5 Encourage commercial uses in East Trail that do not compete with the Downtown and are small in size and scale.

- .6 Discourage automobile oriented businesses such as gasoline service stations, automobile repair shops and car dealerships along 2nd Avenue in East Trail.
- .7 Work with the property owners, businesses and the community to prepare an Enhancement Strategy to improve the appearance and character of the area. Efforts will be focussed on enticing highway motorists into the area through appropriate gateway and signage treatments.
- .8 Work towards establishing a pedestrian and cycling looped trail system between the old and new bridges.
- .9 Continue to support improvements to Gyro Park.
- .10 Consider new parks in East Trail only after the maintenance levels of existing neighbourhood parks are improved.
- .11 Work to ensure adequate and safe pedestrian and vehicle connections are made and maintained with the neighbourhood and J.L. Crowe Secondary School and the Trail and District Regional Hospital.

6.5

tadanac

6.5.1 The Vision

Located on the south bank of the Columbia River, the picturesque neighbourhood of Tadanac offers larger lot living only minutes from the amenities and services of Downtown Trail. This heavily treed neighbourhood is accessible from Highway 22.

The Official Community Plan supports the continued preservation of the larger lot single family character and residential development pattern of the Tadanac neighbourhood.



6.5.2 How will we achieve the Vision?

This section describes the broader vision for the Tadanac neighbourhood. For policies pertaining to specific land use designations permitted in the Tadanac neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, institutional and parks and recreation land uses within Tadanac as illustrated on the Land Use Map.
- .2 Preserve the larger lot single family residential character of Tadanac by discouraging the subdivision of lots to lot sizes less than 930 sq. m (10,000 sq. ft.).
- .3 Work with local residents and Cominco to reduce the visual impact of the smelter on the neighbourhood.

6.6

sunningdale

6.6.1 The Vision

The neighbourhood of Sunningdale is located on the north bank of the Columbia River. The neighbourhood consists primarily of single family residential dwellings accessible by Charles Lakes Drive. Significant neighbourhood features include Sunningdale Elementary School, Upper Sunningdale Park and Lower Sunningdale Park. Bingay Park provides a pleasant landscaped entrance into the neighbourhood.

The Official Community Plan supports the continued preservation of the single family character of the Sunningdale neighbourhood.



6.6.2 How will we achieve the Vision?

This section describes the broader vision for the Sunningdale neighbourhood. For policies pertaining to specific land use designations permitted in the Sunningdale neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, institutional and parks and recreation land uses within Sunningdale as illustrated on the Land Use Map.
- .2 Preserve the single family residential character of the neighbourhood;
- .3 Improve the safety and accessibility of the trail system between Sunningdale, Gyro Park and the Downtown by widening and resurfacing the trail and providing additional lighting.
- .4 Work with School District 20 and the neighbourhood to preserve the presence of the Sunningdale Elementary School in the neighbourhood by considering alternative uses.
- .5 Consider expanding Sunningdale neighbourhood to the north to accommodate future low density residential development.

6.7

shavers bench

6.7.1 The Vision

Shavers Bench is located just south of Highway 3B and north of East Trail. Shavers Bench consists primarily of single family residential dwellings with the exception of the Shavers Bench Townhomes and Pople Park.

Single family residential development shall be encouraged as the predominant form of land use in Shavers Bench.

6.7.2 How will we achieve the Vision?



This section describes the broader vision for the Shavers Bench neighbourhood. For policies pertaining to specific land use designations permitted in the Shavers Bench neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, multi-family residential and parks and recreation land uses within Shavers Bench as illustrated on the Land Use Map.
- .2 Preserve the single family residential character of Shavers Bench.
- .3 Work with the neighbourhood to establish efficient and safe pedestrian linkages to and from nearby schools, recreation facilities and commercial areas.
- .4 Work with the neighbourhood, user groups and the community to examine the future of Pople Park in light of the construction of new playing fields at the Trail Middle School and in the context of a citywide evaluation of current and proposed parks and recreation facility needs.

6.8

glenmerry

6.8.1 The Vision

Glenmerry contains a mix of residential, institutional, parks and recreational and commercial land uses. Single family residential development characterizes much of the central and northern portions of Glenmerry. Service commercial uses exist in close proximity to the intersection of Highway Drive and Highway 3B. A number of institutional uses in the form of churches exist on the north side of Highway 3B. Glenmerry School is also a major feature within the neighbourhood.



Significant increases in traffic volumes on Highway 3B can be expected if the Waneta/Boundary Border crossing is upgraded to accommodate 24-hour commercial truck traffic. For this reason additional residential development adjacent to Highway 3B will only be permitted if adequate setbacks, sound buffering and visual buffering can be put in place. Glenmerry will continue to support a wide range of land uses. Service commercial and multi-family residential will be encouraged along Highway Drive. Single family residential land uses will continue to characterize the majority of Glenmerry.

6.8.2 How will we achieve the Vision?

This section describes the broader vision for the Glenmerry neighbourhood. For policies pertaining to specific land use designations permitted in the Glenmerry neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, multi-family residential, institutional, service commercial and parks and recreation land uses within Glenmerry as illustrated on the Land Use Map, with the exception of the east 86m of Lot 3, DL 4598, Plan 4885, K.D. which may be developed for single and two family residential purposes.
- .2 Discourage additional residential development adjacent to Highway 3B unless adequate setbacks, sound buffering, visual buffering and access roads are implemented.
- .3 Preserve the primary single family residential character of the area.
- .4 Encourage the buffering of service commercial and multi-family residential land uses from adjacent single family residential land uses.
- .5 Encourage service commercial land uses to present a positive image to Highway Drive by screening any outdoor storage of materials from street view.
- .6 Identify opportunities to enhance pedestrian & vehicular linkages to East Trail Commercial area.
- .7 Take full advantage of the neighbourhood's proximity to the Columbia River by ensuring adequate and safe access to the river and by constructing viewing areas.

6.9

miral heights

6.9.1 The Vision

Miral Heights is a relatively new single family residential subdivision in Trail. McBride Street provides access to the neighbourhood off Highway 3B. McBride Street Park provides a beautiful green entrance to the neighbourhood.

The Official Community Plan supports continued single family residential development within Miral Heights.



6.9.2 How will we achieve the Vision?

This section describes the broader vision for the Miral Heights neighbourhood. For policies pertaining to specific land use designations permitted in the Miral Heights neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential and parks and recreation land uses within Miral Heights as illustrated on the Land Use Map:
- .2 Preserve the single family residential character and land use within Miral Heights.
- .3 Work with the neighbourhood to establish efficient and safe pedestrian linkages to adjacent urban areas.

6.10 waneta plaza/rock island

6.10.1 The Vision

The neighbourhood of Waneta Plaza/Rock Island is located outside the main urban areas of the community. Waneta Plaza/Rock Island consists of a mix of Commercial, Service Commercial and Light Industrial land uses. Low Density Residential development catering to the retiree has recently taken place behind Waneta Mall. The area also contains the Trail RV Park and campground and the Columbia Pollution Control Centre.



Developable areas close to urban services and amenities are difficult to find. Waneta Plaza/Rock Island is an example of a neighbourhood that is somewhat isolated from the rest of urban Trail. The goods and services offered at the Waneta Mall can meet the daily needs of the neighbourhood. However, residents are forced to drive or take the bus to access recreational, institutional and employment opportunities. The Official Community Plan supports residential development in the area provided adequate parks are included as part of a development application, to meet the needs of the residents are included as part of a development application.

6.10.2 How will we achieve the Vision?

This section describes the broader vision for the Waneta Plaza/Rock Island neighbourhood. For policies pertaining to specific land use designations permitted in the Waneta Plaza/Rock Island neighbourhood, please refer to section 7.0.

Council's policies are as follows:

- .1 Support single family residential, multi-family residential, commercial, institutional, industrial and parks and recreation land uses within Waneta Plaza/Rock Island as illustrated on the Land Use Map:
- .2 Support the Waneta Mall as a regional shopping mall.
- .3 Buffer the Columbia Pollution Control Centre from adjacent residential land uses with appropriate landscaping and tree planting.
- .4 Identify opportunities for pedestrian and cycling trails that provide access to the Columbia River.
- .5 Work with BC Transit to better service the residents of Waneta Plaza/Rock Island with bus service.
- .6 Support the development of local recreational opportunities adjacent to and within the Columbia River.

6.11

waneta junction

6.11.1 The Vision

The neighbourhood of Waneta Junction was incorporated into the City of Trail in 2000. Waneta Junction is currently experiencing a transition, brought about by the development of Trail's first retail warehouse or "big box" development with regional appeal. In addition to this more recent development, Waneta Junction is characterized by some single family residential and local service commercial land uses.

As servicing was extended to lands within Waneta Junction in 2004, development potential in the neighbourhood is now enhanced. In Waneta Junction's western half, the Official Community Plan supports consolidation of parcels to enhance Trail's only automobile-oriented commercial node with regional appeal. The Official Community Plan also supports continued single family residential development in Waneta Junction's eastern half and along the south side of Highway 22A, near the intersection with Highway 3B.

6.11.2 How will we achieve the Vision?

This section describes the broader vision for the Waneta Junction neighbourhood. For policies pertaining to specific land use designations permitted in the Waneta Junction neighbourhood, please refer to the Official Community Plan and the policies in section 7.3.8.

Council's policies are as follows:

- .1 Support regional commercial, single family residential and parks and recreation land uses within Waneta Junction as illustrated on the Land Use Map (Schedule B).
- .2 Proactively attract appropriate commercial uses to the area.
- .3 Encourage commercial development that has regional appeal and is more appropriate for an automobile-oriented node than the downtown or other neighbourhood commercial districts.
- .4 Encourage non-regional commercial uses to locate in areas other than Waneta Junction.
- .5 Encourage commercial development that will not directly compete against the goals and objectives of Trail's downtown and other neighbourhood commercial districts.
- .6 Work to prioritize redevelopment in a logical, phased approach such that new developments are able to utilize existing access points to Highway 3B and Highway 22A.
- .7 Preserve the single family residential character of Waneta Junction east of Theatre Road.
- .8 Promote appropriate gateway, signage, and other entry or way-finding features on Highway 3B and Highway 22A to welcome tourists and other highway motorists to Trail.

7.0 LAND USE DESIGNATIONS

The future use and development of land within the City of Trail shall be consistent with the overall pattern of land use depicted on the Land Use Map (Schedule B), based on the following land use designations.

- | | |
|-----------------------------------------|--------|
| 1. Single Detached Residential | (SR) |
| 2. West Trail Residential | (WR) |
| 3. East Trail Mixed Residential | (ER) |
| 4. Multiple Residential | (MR) |
| 5. Transition Area | (TA) |
| 6. Commercial | (C) |
| 7. Waneta Mall Commercial Area | (WC) |
| 8. Service Commercial | (SC) |
| 9. Institutional | (IN) |
| 10. Heavy Industrial | (HI) |
| 11. Parks and Recreation | (P) |
| 12. Violin Lake Recreation Master Plan | (VL) |
| 13. Open Space | (OS) |
| 14. Waneta Junction Regional Commercial | (WJRC) |

The general types of uses encouraged in each land use designation are explained in subsequent sections of this bylaw.

Council recognizes that some existing land uses do not conform to the designations shown on the Land Use Map (Schedule B). The intent of Council is not to change the use of this land in the immediate future but to illustrate the preferred pattern of land use as redevelopment occurs while this Official Community Plan is in force.

Broad land use categories such as Residential, Commercial and Industrial are broken up into sub categories such as Single Detached Residential, Service Commercial and Heavy Industrial. The land use sub categories were created to provide residents, developers, Council and staff with some kind of certainty regarding the future land use of an area.

7.1 residential

7.1.1 Background

Existing residential development within the City of Trail consists primarily of single family homes, duplexes and small scale apartment and townhouse developments. The majority of the residential development within the community is located adjacent to the picturesque Columbia River. In order to service the residential areas of Trail efficiently with road, water and sewer infrastructure it is important that the City continues to evolve in a compact and logical way. To this end, the City will take up the challenge to encourage the development of existing vacant areas within the serviced areas of the City, while remaining sensitive to the character of each neighbourhood.

7.1.2 Residential – General Policies:

Council's policies are as follows:

- .1 Encourage the retention and development of a full range of residential types, densities, tenures and prices to accommodate various age groups and household compositions.
- .2 Support residential development that is compatible in character, scale and mass with adjacent development.
- .3 Seniors oriented housing will be encouraged in areas designated Downtown, East Trail Mixed Residential, East Trail Commercial Area, and Multiple Residential as indicated on the Land Use Map.
- .4 Accommodate new residential development primarily within existing serviced areas.
- .5 Encourage higher density residential land use in the following areas:
 - Near established commercial, educational, recreational and employment areas;
 - Along major roads, with the exception of Highway 3B;
 - In areas where existing services can accommodate higher densities;
 - Within other areas designated for Multiple Residential development on the Land Use Map.
- .6 Evaluate the appropriateness of higher density development based on the following set of criteria:
 - Does the project respect the residential character and scale of existing residential development in the neighbourhood?
 - Does the project have direct access to vehicular, public transit and pedestrian transportation linkages?
 - Does the project provide adequate onsite parking?
 - Does the project negatively impact the existing quality of life within the neighbourhood?
- .7 Permit home based business in residential areas throughout the community provided that the business:
 - does not detract from the existing residential character of the area;
 - is not identifiable from the street except for a small sign not to exceed 0.2 sq. m (2.2 sq. ft.) in area;
 - is clearly incidental in size and use to the principal residential purpose of the dwelling; and
 - meets all appropriate regulations.

- .8 Consider, as part of the update to the Zoning Bylaw, regulations to accommodate bed and breakfast operations within the City of Trail, provided that the bed and breakfast operation:
 - Does not negatively impact the neighbourhood;
 - Contains adequate on-site parking;
 - Is limited to a maximum number of units.
- .9 Encourage mixed-use commercial and residential development within the Downtown, the Gulch and East Trail provided that:
 - Residential is located on the upper floors, saving the ground level for commercial uses;
 - Commercial uses contribute to the life and visual quality of the street. This can be accomplished by creating street level entrances and building facades that encourage window-shopping and engage the pedestrian.
- .10 Identify and preserve pedestrian and cycling trail corridors along the Columbia River through the development application process.
- .11 Encourage the preservation of existing vegetation along streams, ponds, steep slopes and ravines, when considering new residential development.

7.1.3 Single Detached Residential (SR)

Council's policies are as follows:

- .1 Preserve and enhance the character of existing single family residential neighbourhoods in Trail by permitting single family residential development in areas designated "SR" on the Land Use Map.
- .2 Duplex residential development is only permitted in areas designated SR within the Waneta Plaza/Rock Island neighbourhood.
- .3 Permit a maximum density of 20 dwelling units per hectare (8 units per acre) of developable area in areas designated "SR" on the Land Use Map.
- .4 Establish a maximum height of 10 m (about 3 storeys) in areas designated "SR" on the Land Use Map.
- .5 Consider other uses in the Single Detached Residential designation including home occupations, parks and playgrounds and small churches.
- .6 Construct gateway features at key entrances to single family residential areas in coordination with the Community Enhancement Strategy.

7.1.4 West Trail Residential (WR)

Council's policies are as follows:

- .1 Preserve and enhance the unique hillside character of West Trail by permitting primarily single family residential development and select duplex and multi-family residential development in areas designated "WR" on the Land Use Map.

.2 Support residential development in areas designated “WR” on the Land Use Map, that remain sensitive to the small scale, size and character of existing single family residential development in West Trail.

.3 Establish a maximum height of 9 m (about 3 storeys) in areas designated “WR” on the Land Use Map.

.4 Permit duplex and multi-family residential land uses with a maximum density of 40 dwelling units per hectare (16 units per acre) in areas designated WR, subject to zoning, with consideration of the following guidelines:

- Is the size and scale of the proposed duplex or multiple family use compatible with the single-family character of the neighbourhood?
- How accessible is the site to vehicular, public transit and pedestrian transportation linkages?
- Is the required parking accommodated efficiently on site? Duplex and multi-family residential developments will be encouraged to take advantage of the sloping hillside and maximize the building site by placing parking underground.
- Will the project create undue stress on the existing road system?



7.1.5 East Trail Mixed Residential (ER)

Council's policies are as follows:

.1 Encourage a mix of residential types and densities ranging from single family residential to duplex to multi-family residential, in areas designated “ER” on the Land Use Map that:

- Remain sensitive to the immediate neighbourhood in terms of development density, scale, and massing;
- Preserve existing vegetation where appropriate and possible;
- Provide landscaping that enhances the character of the development and neighbourhood;
- Retain and enhance the existing neighbourhood character.
- Provide adequate setback distances and landscaped buffers from existing or planned lower density housing;
- Are located near parks, recreational areas and facilities, commercial and employment areas or institutional facilities;
- Are located on sites that facilitate direct and convenient vehicle access so as to avoid generating excessive traffic on local streets;
- Are located on sites where adequate sewer and water services are available or can be provided by the developer.

.2 Consider, as part of the update to the Zoning Bylaw, regulations to permit secondary suites within areas designated “ER” provided that they meet the minimum parcel size and off-street parking requirements described in the City of Trail Zoning Bylaw.

- .3 Permit a maximum density of 40 dwelling units per hectare (16 units per acre) within areas designated “ER” on the Land Use Map. Council may consider applications to rezone new areas to allow residential densities between 40 and 80 dwelling units per hectare (16 - 32 units per acre) if the development meets the following criteria:
 - Provides amenities that may include public gardens, public plazas, playground equipment, public art, pedestrian and bicycle facilities, and other amenities;
 - Provides required onsite parking;
- .4 Require any multi-family residential development within the East Trail Mixed Residential Area to be designated a Development Permit Area for multi-family residential.
- .5 Support residential development that respects the size, scale and character of existing single family residential development in East Trail.
- .6 Encourage residential development to maximize the developable area of a site by constructing underground parking.
- .7 Establish a maximum height of 12 m (about 4 storeys) in areas designated “ER” on the Land Use Map.
- .8 Consider changes to the Zoning Bylaw to accommodate the mix of residential types and densities anticipated within the East Trail Mixed Residential Area.

7.1.6 Multiple Residential (MR)

Council’s policies are as follows:

- .1 Encourage Multiple Residential development including triplexes, townhomes, and apartments in areas designated “MR” on the Land Use Map.
- .2 Consider other uses in the Multiple Residential designation including home occupations, parks and playgrounds and institutional uses.
- .3 Encourage development in areas designated Multiple Residential that:
 - Remain sensitive to the immediate neighbourhood in terms of development density, scale, and massing;
 - Preserves existing vegetation where appropriate and possible;
 - Provides landscaping that enhances the character of the development; and
 - Retains and enhances the existing neighbourhood character.
 - Provides adequate setback distances and landscaped buffers from existing or planned lower density housing;
 - Are located near parks, recreational areas and facilities, commercial and employment areas or institutional facilities;
 - Are located on sites that facilitate direct and convenient vehicular access so as to avoid generating excessive traffic on local streets;
 - Are located on sites where adequate sewer and water services are available or can be provided by the developer.
- .4 Establish a maximum height of 12 m (about 4 storeys) in the Multiple Residential designation.

- .5 Permit a maximum density of 40 dwelling units per hectare (16 units per acre) within areas designated "MR" on the Land Use Map. Council may consider applications to rezone new areas to allow residential densities between 40 and 160 dwelling units per hectare (16 - 65 units per acre) if the development meets the following criteria:
 - Is within close proximity to the Downtown, the Gulch or the East Trail Commercial Areas.
 - Provides amenities that may include public gardens, public plazas, playground equipment, public art, pedestrian and bicycle facilities, and others;
 - Provides required onsite parking;
- .6 Require any multi-family residential development within the Multiple Residential area to be designated a Development Permit Area for multi-family residential.
- .7 Consider small local commercial uses where they are located on the ground floor as an integral part of the Multiple Residential development.
- .8 Support seniors oriented housing in areas designated Multiple Residential on the Land Use Map.
- .9 Institutional uses may be permitted, subject to zoning, in areas designated for Multiple Residential with consideration of the following guidelines:
 - The size, scale, and scope of the proposed institutional uses are compatible with the character of the area;
 - The proposed institutional uses will not have a negative impact including noise, unacceptable traffic generation or invasion of privacy on the adjacent residential use.
 - The institutional uses are directly related to the residential use, including uses such as medical care, meal provision, exercise facilities, and daycare facilities

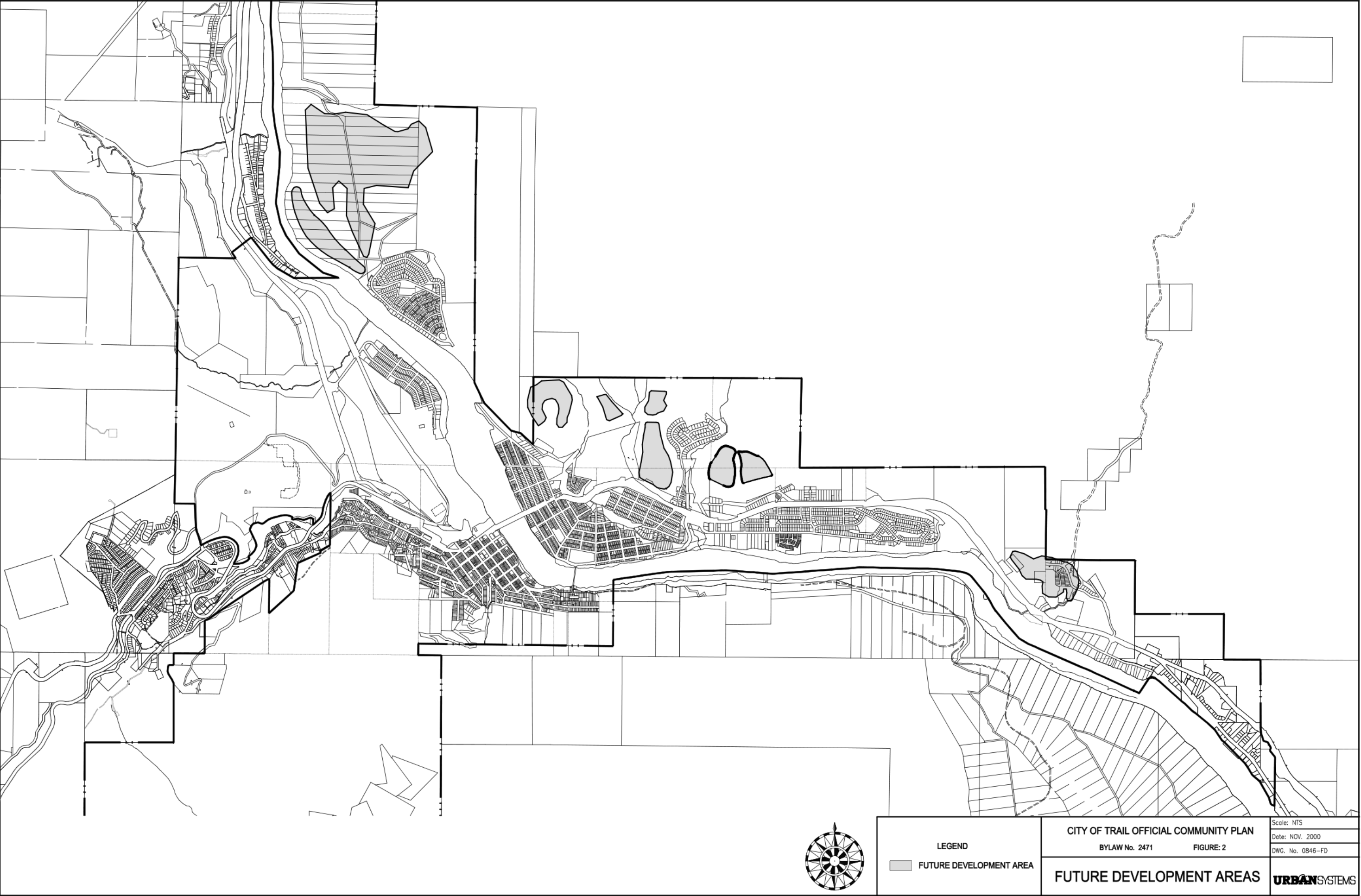
7.1.7 Possible Future Residential Areas

- .1 Where new development cannot be accommodated in areas already serviced, the development of completely new serviced residential subdivisions will be directed primarily towards the areas identified in Figure 2.
- .2 New residential development will be required to prepare a comprehensive Neighbourhood Plan to address the following issues prior to development approval:
 - On and off-site servicing requirements and necessary upgrades;
 - Geotechnical analysis may be required to determine site suitability;
 - Transportation linkages including pedestrian connections to adjacent systems;
 - Proposed land uses and the associated impact on adjacent neighbourhoods;
 - Proximity to community services and amenities;
 - Location of proposed park and recreation space;
 - Location of vegetation to be preserved;
 - Type and location of neighbourhood amenities that may include children's playground equipment, landscaping, wetland or hillside open space areas, trail systems and others.

7.1.8 Special Needs/Affordable Housing

Council's policies are as follows:

- .1 Encourage a diversified range of housing types and tenures for people with varying income levels. Special housing needs for seniors are recognized and development of a variety of appropriate housing forms is encouraged.
- .2 Direct the following types of special needs housing to areas designated Gulch Commercial Area, Downtown Commercial Area, West Trail, East Trail Mixed Residential, Transition Area and Multiple Residential:
 - Group homes;
 - Extended care facilities;
 - Retirement homes providing intermediate or extended care services;
 - Community care housing;
 - Seniors and special needs housing.
- .3 Recognize East Trail and West Trail as important suppliers of affordable housing stock in the City of Trail.



7.2 transition area

7.2.1 Background

The Official Community Plan has designated a number of areas within the community as Transition Areas. Transition Areas have unique qualities that lend themselves to redevelopment in the short term. For example, the Transition Area at the south end of Downtown is located on the riverfront, has dramatic views and is within close proximity to the Downtown. This combination of site features makes multiple residential development in this area more realistic and feasible than single detached residential. Policies contained within the Official Community Plan will proactively support the redevelopment of these areas to higher density forms of residential.

7.2.2 Transition Area (TA) – General Policies

Council's policies are as follows:

- .1 Actively promote the redevelopment of single detached and duplex residential properties to higher density forms of multi-family residential development including seniors housing, in areas designated "TA" on the Land Use Map.
- .2 Discourage rezoning applications to lower density, single detached or duplex residential in areas designated Transition Area on the Land Use Map.
- .3 Permit a maximum building height of 12 m (about 4 storeys) in areas designated Transition Area except for the Transition Area at the north end of the Downtown, where the maximum building height permitted is 20 m (about 6 storeys).
- .4 Permit a maximum density of 80 dwelling units per hectare (32 units per acre) of developable area within the Transition Areas located on McBride Street, on Columbia Avenue west of McQuarrie Street, on Columbia Avenue east of Main Street, and at the south-east end of Downtown.
- .5 Permit a maximum density of 100 dwelling units per hectare (40 units per acre) of developable area within the Transition Area located in the Gulch.
- .6 Permit a maximum density of 160 dwelling units per hectare (65 units per acre) of developable area within the Transition Area located at the north-west end of Downtown.
- .7 Require any multi-family residential development within the Transition Area to be designated a Development Permit Area for multi-family residential.
- .8 Ensure new development within areas designated Transition Area, positively contributes to the character of the surrounding neighbourhood.
- .9 Recognize the Transition Areas in the Gulch and the north end of Downtown as important gateways to the community.
- .10 Ensure riverfront development in Transition Areas preserve public access for trail purposes.
- .11 Support mixed-use residential and commercial development within the Transition Areas located in the Gulch and on Columbia Avenue east of Main Street, provided the ground floor is used for commercial purposes.

7.3

commercial

7.3.1 Background

The City of Trail is fortunate to have avoided strip commercial development within their City limits. Instead, commercial land uses have developed in relatively compact nodes in the Gulch, Downtown, East Trail, Highway Drive area and Waneta. These five areas provide a wide range of commercial opportunities to the residents of Trail and surrounding region. The Official Community Plan supports the continued development of each commercial node within the community. Directing appropriate uses to specific areas will discourage competition between commercial nodes.

7.3.2 Commercial – General Policies:

Council's policies are as follows:

- .1 Encourage a range of commercial development within the City of Trail to meet the needs of Trail residents and visitors.
- .2 Solidify the Downtown as the major commercial focal point of the Greater Trail region for business, finance, government, advanced education, retail trade, services, tourist accommodation, recreation, culture and entertainment.
- .3 Ensure that all commercial development is of a high standard and reinforces Trail's unique heritage and character.
- .4 Encourage commercial development primarily within the following commercial nodes: the Gulch, Downtown, East Trail along 2nd Avenue, Columbia Avenue east of Main Street, on Highway Drive and in Waneta.
- .5 Encourage multi-family residential and mixed-use development to locate in or near the Gulch, Downtown, East Trail along 2nd Avenue, and Columbia Avenue east of Main Street.

7.3.3 The Gulch Commercial Area

Council's policies are as follows:

- .1 Direct retail trade, personal service, small-scale office, multiple residential and institutional land uses that are dependent on highway exposure, to the area within the Gulch designated Commercial ("C") on the Land Use Map. For convenience this area is referred to as the Gulch Commercial Area.
- .2 Facilitate an active street life in the Gulch Commercial Area by:
 - Making sidewalks and corner ramp areas more accessible for the entire community;
 - Encouraging outdoor restaurants and seating areas provided they do not cause a safety concern and adequate space remains for efficient pedestrian movement;
 - Permitting the display and sales of materials and products on the sidewalk;
 - Constructing appropriate pedestrian facilities including public washrooms, benches, bike racks and rest areas in easily accessible and visible locations.
- .3 Discourage automobile-oriented businesses such as gasoline service stations, fast food outlets and car dealerships in the area designated Gulch Commercial Area on the Land Use Map.

- .4 Allow multi-family residential development within the Gulch Commercial Area provided that the ground floor contains commercial uses.
- .5 Permit a maximum building height of 12 m (about 4 storeys) in the Gulch Commercial Area in order to maximize the amount of sun that shines into the area.
- .6 Work with property owners, businesses and the community to prepare a Community Enhancement Strategy that is focussed on the Gulch Commercial Area. The Strategy will examine the following issues in an effort to facilitate appropriate development:
 - Consider phased revitalization of public property within the Gulch based on a priority level;
 - Create realistic and flexible design guidelines that achieve the desired architectural form without passing on unnecessary costs to the developer;
 - Focus on pedestrian safety, accessibility, interest and comfort;
 - Consider additional tree planting to improve the aesthetics of the corridor and to improve the livability of the area;
 - Construct interpretive features that help people remember the heritage of the area;
 - Reinforce the importance of various cultural and historical buildings located along Rossland Avenue (e.g. St. Anthony's Catholic Church, Colombo Lodge, etc.)
 - Identify areas suitable for redevelopment;
 - Identify suitable parcels of land to accommodate off-street public parking; and
 - Identify shared access opportunities to Rossland Avenue.
- .7 Support the reuse of existing single family residential buildings in the Gulch Commercial Area for commercial, multi-family residential and institutional purposes.



7.3.4 The Downtown Commercial Area

Council's policies are as follows:

- .1 Direct major retail, personal service, office, multi-family residential, parks and recreation, and institutional uses to the areas within the Downtown designated Commercial ("C") as illustrated on the Land Use Map. For convenience this area will be referred to as the Downtown Commercial Area.
- .2 Discourage office uses from locating in areas other than the Downtown Commercial Area, except for small-scale office uses in the East Trail Commercial Area or ancillary office uses in conjunction with industrial and service commercial enterprises.
- .3 Encourage commercial and residential mixed-use development within Downtown provided that:
 - Residential is located on the upper floors, preserving the ground level for commercial uses;
 - Commercial uses contribute to the life and visual quality of the street. This can be accomplished by creating street level entrances and building facades that encourage window shopping and engage the pedestrian.



- .4 Continue to work with the Chamber of Commerce and area businesses and landlords to promote the Downtown and the services and amenities that it offers.
- .5 Facilitate an active street life in the Downtown Commercial Area by:
 - Making sidewalks and corner ramp areas more accessible for the entire community;
 - Encouraging outdoor restaurants and seating areas provided they do not cause a safety concern and adequate space remains for efficient pedestrian movement;
 - Permitting the display and sales of materials and products on the sidewalk;
 - Constructing appropriate pedestrian facilities including public washrooms, benches, bike racks and rest areas in easily accessible and visible locations;
- .6 Continue to work towards improving the access, amount and availability of parking in the Downtown.
- .7 Work with the Chamber of Commerce and local business to identify measures and take steps toward encouraging tourists and other highway motorists to stop in the Downtown Commercial Area.
- .8 Examine the possibility of providing areas for RV parking in locations that are highly visible from Highway 3B and close to the Downtown Commercial Area.

7.3.5 East Trail Commercial Area

Council's policies are as follows:

- .1 Direct small-scale retail, personal service and office uses to the areas within East Trail designated Commercial ("C") on the Land Use Map. For convenience this area is referred to as the East Trail Commercial Area.
- .2 Discourage commercial operations in the East Trail Commercial Area that provide regional services.
- .3 Discourage automobile oriented businesses such as gasoline service stations, automobile repair shops and car dealerships in the East Trail Commercial Area.
- .4 Continue to support the conversion of older homes on 2nd Ave. into home/office commercial uses.
- .5 Encourage the infilling of vacant or underutilized commercial parcels within the East Trail Commercial area before considering expanding the commercial area.
- .6 Facilitate compact urban form by encouraging buildings to develop adjacent to the front property line except where a plaza or courtyard is being constructed. On site parking will be encouraged to locate behind or underneath the building.
- .7 Encourage commercial and residential mixed-use development within the East Trail Commercial Area provided that:
 - Residential is located on the upper floors, preserving the ground level for commercial uses;
 - Commercial uses contribute to the life and visual quality of the street. This can be accomplished by creating street level entrances and building facades that encourage window shopping and engage the pedestrian.



- .8 Construct safe and efficient pedestrian connections to adjacent residential and parks and recreational land uses.
- .9 Construct appropriate gateway and signage features at the corner of Highway 3B and 2nd Avenue and at the corner of 2nd Avenue and McQuarrie Street to attract tourists and other highway motorists to the East Trail Commercial Area.
- .10 Identify and prioritize enhancement opportunities within the East Trail Commercial Area focussing on the following:
 - Building façade improvements;
 - Opportunities for parks, plazas and gathering spaces;
 - Opportunities for public art;
 - Pedestrian safety, accessibility and comfort;
 - Tree planting to improve the aesthetics of the area;
- .11 Facilitate an active street life in the East Trail Commercial Area by:
 - Making sidewalks and corner ramp areas more accessible for the entire community;
 - Encouraging outdoor restaurants and seating areas provided they do not cause a safety concern and adequate space remains for efficient pedestrian movement;
 - Permitting the display and sales of materials and products on the sidewalk;
 - Constructing appropriate pedestrian facilities including public washrooms, benches, bike racks and rest areas in easily accessible and visible locations;

7.3.6 Service Commercial (SC)

Council's policies are as follows:

- .1 Direct service commercial uses such as automobile sales and service stations, warehousing, commercial storage, equipment sales, rental and repair and building supply centres to those areas designated "SC" on the Land Use Map.
- .2 Encourage infill of vacant Service Commercial parcels before designating additional Service Commercial areas.
- .3 Permit a maximum building height of 12 m (about 39 ft.) in areas designated "SC".
- .4 Ensure that parcels designated Service Commercial are adequately buffered or screened from adjacent residential, parks and recreation, and institutional uses.
- .5 Discourage elongated highway strip development and encourage highway commercial development to be concentrated in nodes where possible.
- .6 Continue to work with the Ministry of Transportation and Highways to achieve good access management, consistent with transportation planning principles.
- .7 Ensure freestanding signage is not visually intrusive and is at a scale that is consistent with service commercial uses.



7.3.7 Waneta Mall Commercial Area (WC)

Council's policies are as follows:

- .1 Recognize the regional importance of the Waneta Mall and support the range of commercial uses currently present including, retail, restaurant, personal service and others in areas designated "WC" on the Land Use Map.
- .2 Permit a maximum building height of 12 m (about 4 storeys) in the Waneta Mall Commercial Area.

7.3.8 Waneta Junction Regional Commercial (WJRC)

Council's policies are as follows:

- .1 Direct large-scale retail and automobile-oriented uses serving a regional market to areas designated Waneta Junction Regional Commercial ("WJRC") on the Land Use Map. Properties for these uses shall be of sufficient size to accommodate large-scale buildings and their off-street parking and loading needs.
- .2 Encourage the consolidation of smaller lots to provide additional sites for regional commercial development.
- .3 Direct commercial uses such as fast food outlets, restaurants, gas stations, and smaller retail uses with regional appeal to areas designated "WJRC" on the Land Use Map. These uses should support the large-scale retail uses in Waneta Junction. Although these uses may be located within all areas designated "WJRC", special consideration shall be given to accommodate these uses on smaller sites that are unable to accommodate large format retail uses. Examples of such smaller sites are the following:
 - Parcels on the north side of Highway 3B across from Wal-Mart, which are constrained by steep slopes; and
 - Parcels that are constrained by existing road alignments, such as those which are located in between Highway 3B and Highway 22A, near the intersection of the two highways.
- .4 Encourage shopping centres and other forms of commercial development that will directly compete with Trail's downtown and other neighbourhood commercial districts to locate in areas designated "WJRC".
- .5 Specifically discourage banks and other financial institutions from locating within areas designated "WJRC".
- .6 Permit a maximum building height of 12 m (about 39 ft.) in areas designated "WJRC".
- .7 Ensure that parcels designated "WJRC" are adequately buffered or screened from major streets and adjacent residential, parks and recreation, open space, and institutional uses.
- .8 Ensure that freestanding signage is not visually intrusive and is at a scale that is consistent with regional commercial uses.
- .9 Ensure that lighting installed in parking lots is not visually intrusive to adjacent residential areas.
- .10 Require a concept plan for new developments, to show how they will relate to adjacent properties and fit into the neighbourhood context.
- .11 Designate a Waneta Junction Regional Commercial Development Permit Area to ensure a high standard of architectural and streetscape design.

7.4

institutional

7.4.1 Background

The institutional sector of Trail is largely scattered throughout the Downtown Commercial Area with the some exceptions. Key institutional uses in the City include the Selkirk College, the Trail and District Regional Hospital, local schools, the RCMP station, Trail Municipal Hall, and the Regional District of Kootenay-Boundary offices.

The Official Community Plan recognizes the important contribution of institutional development to the local economy. Health, education, special government services and research are some of the key contributors to economic diversification and commercial growth. To this end, the Official Community Plan will encourage the creation of a Civic Precinct in the Downtown Commercial Area to create the critical mass necessary to spark redevelopment and revitalization in the area.



7.4.2 Institutional (IN) – General Policies

Council's policies are as follows:

- .1 Accommodate institutional uses including schools, hospitals, major churches, recreation facilities and other institutional facilities in areas designated as "IN" on the Land Use Map. Institutional uses may also be accommodated in other designations as set out in the policies below.
- .2 Accommodate institutional uses including the Municipal Hall, the Seniors Centre, Selkirk College, Provincial Government Offices and other civic uses in the Downtown Commercial Area and the Gulch Commercial Area.
- .3 Work with the Greater Trail Community Health Council to provide additional care facilities.
- .4 Encourage Congregate Care facilities within the City of Trail that provide health care services that cater to the level of care required for each individual.
- .5 Encourage government offices to locate in the Downtown Commercial Area.
- .6 Support small-scale institutions in areas designated "Single Detached Residential", "West Trail Residential", "East Trail Mixed Residential" and "Multiple Residential" subject to zoning.
- .7 Work with the Greater Trail Community Health Council, the RCMP and the Kootenay Boundary Regional Fire Services to implement a 911 emergency response service within the City of Trail.
- .8 Work with the Greater Trail Community Health Council, the RCMP and the Provincial Government to improve ambulance response times within the City of Trail.

7.4.3 Civic Precinct Policies

Council's policies are as follows:

- .1 Recognize the important function of institutional uses as economic generators within the community.



- .2 Encourage the concentration and grouping of institutional buildings in a civic precinct in the Downtown Commercial Area in order to enhance accessibility and convenience to the community. The benefits of concentrating institutional uses in a civic precinct include:
 - Opportunity to share resources including administrative staff, office space, meeting rooms, parking facilities and others;
 - Creates a critical mass that is more powerful than facilities spread throughout the community;
 - Creates an area of focus from which to generate revitalization and redevelopment momentum;
 - Facilities such as the museum, community theatre and art gallery become more prominent tourist assets at street level;
 - Opportunity to improve the general appearance of Selkirk College through façade improvements and building alterations;
 - Proximity to Groutage Avenue properties would further enhance the area's residential potential.

- Facilitates continued development of the riverfront walkway and trail system;
- May facilitate additional residential development in the Downtown;
- Initiate revitalization of Cedar and Bay avenues;
- Economic development in the form of new business is attracted to areas that have high pedestrian and traffic counts. Institutional uses such as a library, City Hall, art gallery, etc. provide a steady stream of traffic that can benefit a commercial area;
- Helps create the “heart” and a sense of pride for a community;
- Convenient and easily accessible location especially for those without vehicular transportation;

.3 Consider a variety of institutional uses within the civic precinct including:

- The Trail and District Public Library;
- City Hall;
- Greater Trail Community Centre
- Trail and District Community Theatre;
- Seniors Centre;
- Visac Art Gallery;
- Museum;
- Social Services offices;
- Government offices;
- Ancillary meeting rooms;
- Selkirk College;
- Associated retail; and
- Others.

.4 Consider establishing partnerships with the public and private sectors to construct a civic precinct in the vicinity of the Selkirk College.

.5 Consider constructing a parkade within the civic precinct to meet facility parking demands and alleviate some of the parking concerns in the Downtown neighbourhood.

7.5

industrial

7.5.1 Background

Industry represents a critical component of the Trail economy. Industry provides employment and a diversified tax base in the City. However, the City of Trail has very little land left for industrial land use. Natural features such as steep slopes and the Columbia River have limited the potential for industrial expansion within the community. The Official Community Plan recognizes that the City may have to look outside its borders for suitable land to accommodate future industry.

Notwithstanding the City's enthusiasm for industrial growth, the City will not support industrial developments that could seriously degrade its environment and undermine its overall quality of life. In this regard the City will work with local agencies, organizations and interest groups to attract clean industrial operations.

7.5.2 Industrial – General Policies

Council's policies are as follows:

- .1 Encourage industry within Trail that takes advantage of the significant presence of Cominco within the community.
- .2 Consider boundary expansion into the Fort Shepherd Flats and Columbia Gardens area of the Regional District of Kootenay-Boundary, to provide additional industrial land.
- .3 Encourage industry in Trail that does not negatively affect the natural environment or quality of life for Trail residents.
- .4 Encourage small scale industry within Trail that recognizes the City's locational advantages including its close proximity to:
 - the Columbia River;
 - US markets (e.g. Spokane);
 - Cominco Ltd.; and
 - the West Kootenay market.



7.5.3 Heavy Industrial (HI)

Council's policies are as follows:

- .1 Direct Heavy Industrial land uses that generally have specific infrastructure requirements, larger external impacts and require larger parcels to areas designated "HI" on the Land Use Map. Examples of Heavy Industrial land uses include material processing, fabricating and assembly, warehousing, transporting and cartage, wholesaling, wrecking and salvage operations, heavy equipment sales and incidental office facilities.
- .2 Continue to recognize the significant contribution of Cominco Ltd. to the City of Trail by supporting the industrial initiatives of Cominco Ltd.
- .3 Continue to protect the industrial integrity of Cominco Ltd. from encroachment by incompatible land uses including residential and commercial development.
- .4 Continue to work with Cominco Ltd. to reduce the visual impact of the facility on the community by considering additional tree planting, hydro seeding and screening.
- .5 Continue to maintain direct pedestrian access to Cominco Ltd. via the covered staircase at the Trail Memorial Centre.

7.6 parks & recreation

7.6.1 Background

Located in the picturesque Columbia River Valley, the City of Trail has immediate and easy access to the great outdoors. The City of Trail is also blessed with a variety of parks and recreational facilities within its boundaries. The Official Community Plan survey results indicate a desire to improve maintenance standards of existing parks prior to considering the construction of additional parks or recreational facilities within the City.



The Official Community Plan supports the continued implementation of a City wide pedestrian and cycling trail system to link the neighbourhoods of Trail with the Columbia River, local parks, schools, the Downtown and other regional pedestrian and cycling systems.

The Official Community Plan also supports a system of parks and recreational facilities that is accessible to all segments of the population for active and passive use. The system of parks and recreation facilities should strive to facilitate community, neighbourhood and local-area functions and special-purpose uses such as riverfront and downtown parks. The system should be available to all age and income groups and mobility levels, as well as tourists.

7.6.2 Parks and Recreation (P) – General Policies

Council's policies are as follows:

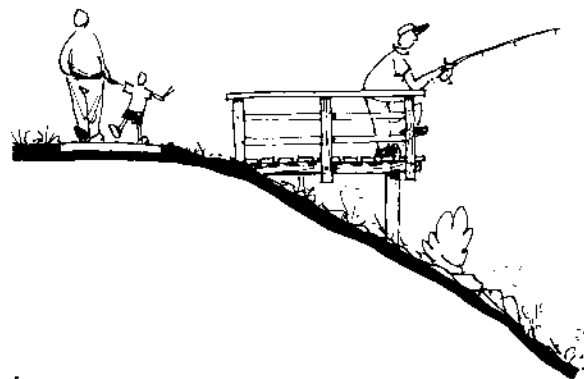
- .1 Permit parks and recreation uses including trails, playground areas and sports fields in areas designated "P" on the Land Use Map.
- .2 Improve park maintenance standards throughout the community to make better use of existing park and recreation facilities, facilitate a sense of community pride and discourage vandalism;
- .3 Establish a system of parks and recreational facilities that is:
 - accessible to all segments of the population;
 - for residents and tourists alike;
 - for both active and passive use;
 - community, neighbourhood and local-area focussed;

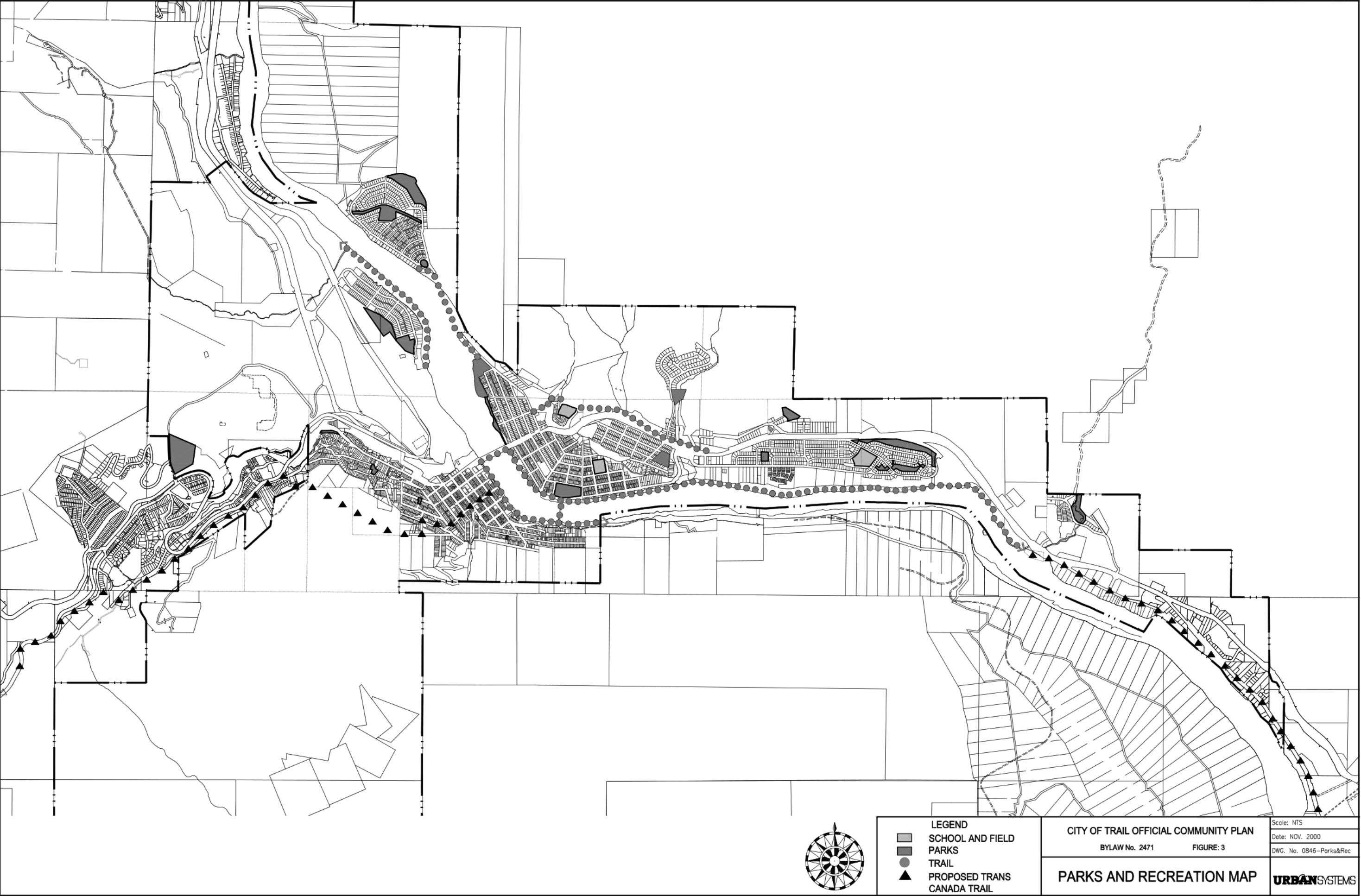
- .4 Work with local neighbourhood associations, interest groups and user groups to prepare a community wide Parks and Recreation Master Plan that details the short and long term improvements required for each park and recreation facility within the community. The Plan will specifically address the following:
- Inventory of existing parks and recreation facilities;
 - Determine the short and long term parks and recreation needs of the community;
 - Identify any short falls in the provision of parks and recreation services;
 - Determine the maintenance levels required to maintain the facilities;
 - Identify opportunities for new park and recreation facilities;
 - Identify partnership opportunities with local agencies and user groups;
 - Prepare a capital expenditure plan that details the improvement costs;
- .5 Continue to partner with local residents, School District 20 and recreation groups to provide signage, public facilities or maintenance within public parks and recreation areas.
- .6 Establish a pedestrian and cycling trail network throughout the City that links important community features including schools, commercial areas to the riverfront and other recreational areas. The network should include interpretive features, rest stops, bike racks and viewing areas;
- .7 Develop a signage strategy to promote existing parks and recreational fields within the community;
- .8 Continue to promote and maintain cooperation with the Trail and District Recreation Commission, the Kootenay-Boundary Regional District, the School District No. 20, the Provincial Government and public and private voluntary associations in identifying and meeting park and recreation needs in the community;
- .9 Ensure wherever possible that new parks be located in areas that are visually accessible by adjacent uses so as to facilitate the safe use of the park for a variety of activities throughout the day.
- .10 Ensure redevelopment of riverfront parcels provide adequate public access for trail purposes.
- .11 Dedicate five percent of the land being subdivided in a residential area, or cash in lieu of the land to the City of Trail for parkland purposes in accordance with the Local Government Act. Cash in lieu of land may be taken where:
- the dedication of scattered public parks may be impractical;
 - a suitable site is not available with the proposed subdivision;
 - the proposed subdivision has adequate access to existing parkland;
- .12 Consider involving local residents, neighbourhood groups and other community interests in park clean-up, vandalism watch, enhancement activities, event sponsorships, and capital improvements by establishing a private-public partnerships in parks program.
- .13 Work with local recreational user groups to identify possible staging areas for various recreational activities adjacent to and within the Columbia River including river kayaking, tubing, fishing and swimming. Staging areas may include onsite parking facilities, trail development, boat launch and public washrooms.
- .14 Take advantage of Waneta Junction's proximity to the Columbia River by acquiring parkland along Old Waneta Road, in the location depicted on the Land Use Map (Schedule B).

7.6.3 Trails

Council's policies are as follows:

- .1 Develop a Trail System Strategy that details the location of trail corridors, view points, rest areas, benches, tree planting and river access points. Trail routes to consider are illustrated on Figure 3, Parks and Recreation.
- .2 The trail system should be constructed adjacent to the riverfront wherever possible. Key components of the trail system include:
 - Appropriate trail design to accommodate a variety of users including pedestrians, roller bladers, cyclists, and others;
 - Appropriate trail treatments that may range from crushed gravel to asphalt;
 - Appropriate signage at trail connections to provide descriptive information about the trail system;
 - Direct linkages with regional trail systems;
 - Direct linkages with important community features such as the East Trail commercial area, local schools, parks, and river access points;
- .3 Support the construction of the Trans-Canada Trail through the City of Trail.
- .4 Identify and construct appropriate secondary trails to function as branches of the Trans Canada Trail.
- .5 Work with private property owners and the applicable government ministries to establish a loop pedestrian/cycle trail system between the two bridges.
- .6 Work with local service groups, interest groups and user groups to consider an adopt-a-trail system to formalize the responsibility structure for trail maintenance.
- .7 That as a condition of the approval of a subdivision or the development of land, any existing trails be protected by dedication of appropriate right-of-way or by other means agreed to with the landowner.
- .8 That Council protect trail corridors identified in the Trail System Strategy when the subdivision or development of land takes place and ensure there is public access through the property to any trails beyond the property being developed.





7.7

violin lake

7.7.1 Background

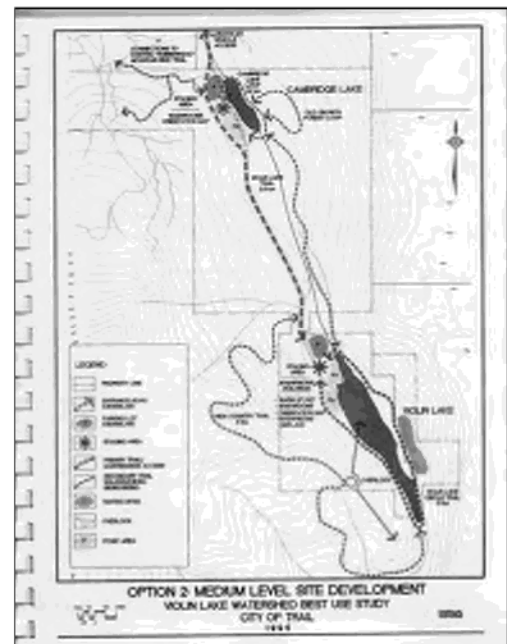
Violin Lake is situated between two relatively steep mountain slopes approximately 5 kilometers southwest of the City of Trail. The City of Trail used the Violin Lake, Cambridge Creek watershed as its primary water supply for approximately 75 years. The commissioning of the Columbia River water supply has made the old system redundant as a water supply source for the City of Trail. In 1995 the City of Trail initiated the Violin Lake Best Use Study. The purpose of the study was to evaluate the potential of the site for recreational purposes. The study recommended that Council consider developing the Violin Lake area for public recreational day use only including activities such as hiking, ice fishing, cross-country skiing, non-motorized boating, mountain biking, swimming and wildlife viewing.

The Official Community Plan supports the development of Violin Lake for public recreational day use.

7.7.2 Violin Lake Recreational Master Plan Area (VL) – General Policies

Council's policies are as follows:

- .1 Develop land designated "VL" on the Land Use Map for low intensity public recreational use as per Option 1 of the *Violin Lake Best Use Study*.
- .2 Permit forestry uses on lands located within the Forest Land Reserve.
- .3 Consider selective logging to help finance public recreational use development. Any logging must be sensitive to the quality and character of the environment, and cannot compromise the dramatic views available from the site.
- .4 Prepare the Violin Lake Recreation Master Plan for the area designated "VL" on the Land Use Map, prior to any development.
- .5 The Violin Lake Recreation Master Plan will provide detail regarding the following:
 - Permitted recreational uses within the Violin Lake Recreational Master Plan Area;
 - Trail location, treatment and linkages to other local and regional trail systems including the Trans Canada Trail;
 - Financial strategy to ensure the long term viability of the recreational area;
 - Road access and recreational area parking;
 - Work with local naturalist groups to identify significant plant material;
- .6 Maintain the existing waterworks infrastructure in the study area, including water licenses, and ensure development of the area is carried out in a manner that will facilitate the watershed to be used for domestic water supply in the future if desired.



7.8

open space

7.8.1 Background

Due to the extreme topography within the City of Trail municipal boundaries, a significant amount of land has remained undeveloped. These areas tend to be located along the ridges above East and West Trail and in the Violin and Cambridge Lake basin. These undeveloped areas contribute significantly to the natural setting of the community. It is unlikely that these areas will develop in the short term.

The Official Community Plan supports the preservation of these areas in their natural form for informal recreational uses.

7.8.2 Open Space (OS) – General Policies

Council's policies are as follows:

- .1 Permit appropriate uses including trails, interpretive facilities, habitat protection and restoration, habitat enhancement, erosion control works, fencing, signage, and other uses that do not result in unacceptable degradation of the natural environment within the area designated "OS" on the Land Use Map.
- .2 Lands designated "OS" on the Land Use Map, should remain largely in their natural condition because they are located on steep slopes, in ravines, directly adjacent to creeks and rivers, in areas that are undevelopable, and in areas that provide important habitat.
- .3 Permit agricultural uses on lands designated "OS" on the Land Use Map and located within the Agricultural Land Reserve.
- .4 Permit forestry uses on lands designated "OS" on the Land Use Map and located within the Forest Land Reserve.
- .5 Permit new residential development in areas designated "OS" on the Land Use Map, provided:
 - that a comprehensive neighbourhood plan is completed prior to development approval to address issues including site suitability, servicing, transportation linkages, proposed land use, public amenities and others; and
 - that the land is redesignated to the relevant residential designation.
- .6 Consider increased involvement with local residents and other community interests in natural area improvements, clean-up, and enhancement activities, by establishing a partnerships in parks program.
- .7 Where accessibility to natural areas is encouraged, provide clear access points and signage to discourage usage outside designated areas.
- .8 Retain significant natural vegetation wherever possible.

8.0 FLOODPLAIN AND HAZARDOUS AREAS

8.1 Background

Some lands in Trail are affected by hazards including flooding, steep slopes and unstable soils and erosion. With the controlled flows and high banks of the Columbia River the flood danger is limited. A number of creeks flow through the City of Trail with a history of flooding. Efforts are continuing to reduce the flood potential of creeks such as Gorge Creek and Trail Creek.

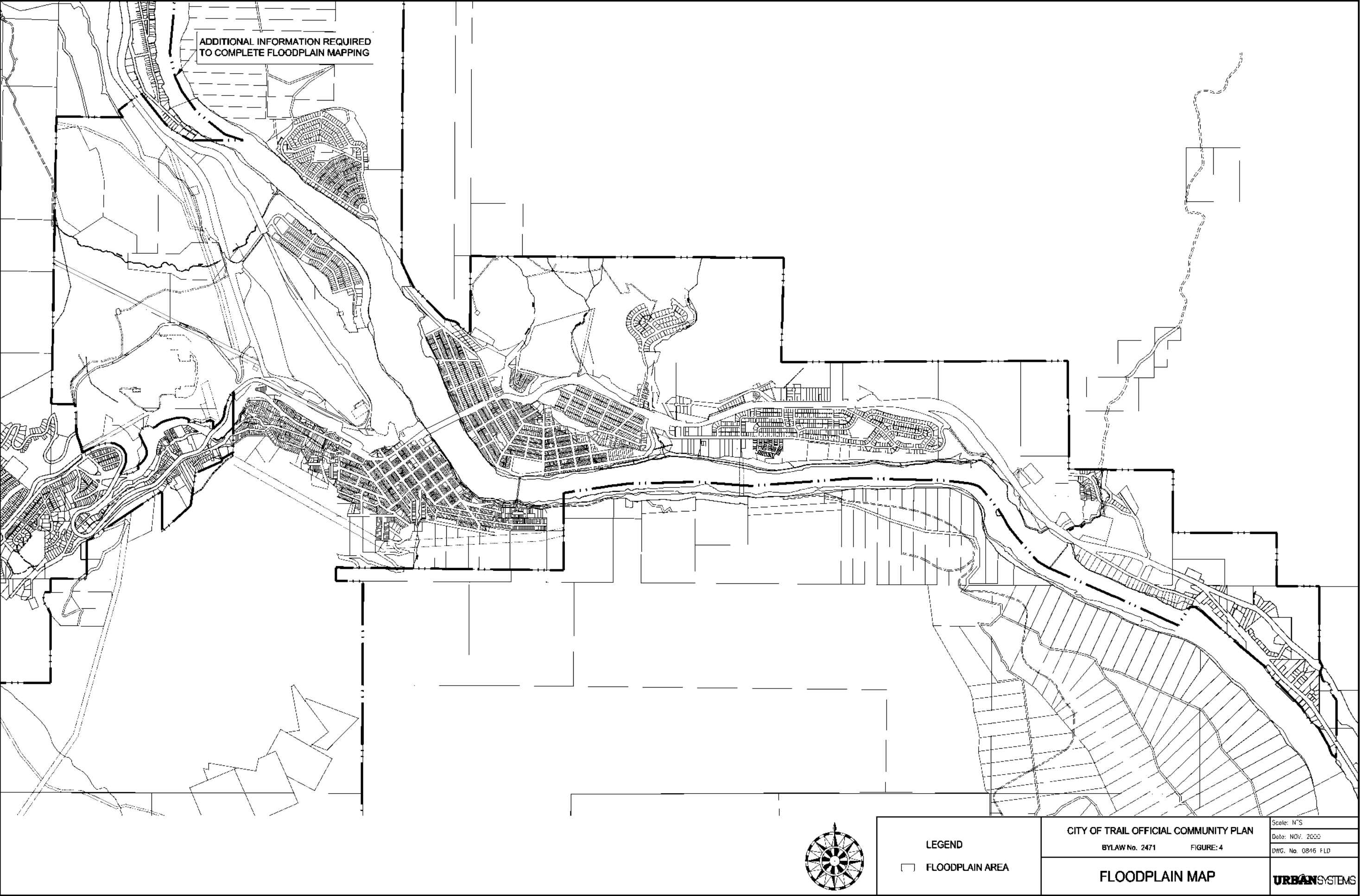
Steep slopes with grades of more than 30% (a 30% grade means an increase of 30 metres in elevation for every 100 metres of distance) exist on the valley sides and in isolated areas with steep embankments. Steep slopes make development difficult, increasing the possibility of rock fall, land slip, land slide and debris torrent.

The Official Community Plan in general discourages development in hazardous areas unless measures are taken to address the hazard. Geotechnical studies to determine how such lands can be developed safely may be required.

8.2 Floodplain and Hazardous Areas – General Policies

Council's policies are as follows:

- .1 Recognize the following areas as hazardous areas:
 - The Columbia River floodplain as illustrated on Figure 4;
 - Gorge Creek;
 - Randall (Lawley) Creek;
 - Trail Creek; and
 - Steep slopes with grades in excess of 30%;
- .2 Encourage the use of lands susceptible to flooding for parks, recreational or open space purposes
- .3 Recognize where lands that are subject to flooding, the construction and siting of buildings and mobile homes to be used for habitation, business or the storage of goods damageable by floodwaters shall be flood proofed to those standards specified by the Ministry of Environment, Lands and Parks.
- .4 Generally discourage development within the steep slopes (greater than 30%) areas. Development on steep slopes will be considered only if the developer, provides a report from a professional geotechnical engineer, setting out how the area can be developed safely and in an aesthetically pleasing manner.
- .5 Future amendments to the Official Community Plan may be considered upon further assessment of hazard lands in the City and review of available legislative tools.
- .6 Develop a floodplain bylaw in consultation with the Ministry of Environment, Lands and Parks.



9.0 TRANSPORTATION

9.1 Background

The role of a transportation network is to facilitate vehicular and pedestrian traffic movements between various land use components. The performance of the network affects quality of life, the economic well-being and generally the success of the neighbourhood and land use areas within the community.

9.2 Roads – General Policies

Council's policies are as follows:

- .1 Work with the Ministry of Transportation and Highways to re-evaluate and implement the Major Street Network Plan, Figure 5 within the lifetime of this Official Community Plan.
- .2 Continue to implement a road improvement program for roads within the City of Trail as outlined in the 1999 Infrastructure Study.
- .3 Examine ways to improve traffic circulation throughout the community but specifically in the residential areas in West Trail.
- .4 Work with the Ministry of Transportation and Highways to review the cross-section of Highway 3B/22 with respect to continuity, access to adjacent property, safety and signs and markings, and carry out conceptual planning for upgrading as described in the 1999 Infrastructure Study.

These improvements might include:

- Closure of access to/from Bailey Street (Highway 3B) at Fourth Avenue;
 - Install a stop sign on Hazelwood Drive, Sunningdale, at its intersection with Hillside Drive and Charles Lake Drive, giving priority to traffic on Hillside.
 - Implement traffic management/urban design measures on Cedar Avenue to reinforce existing features to favour pedestrians and transit (e.g. wider footways, benches, trees and flowers and others).
 - Maintain strict enforcement of speed limits on major arterials such as Highway Drive and Second Avenue. Consider traffic calming measures if necessary.
 - Carry out a Traffic Control Device Review to ensure consistency, safety and clarity in signs, markings and traffic control devices in the City of Trail.
- .5 Upgrade major collector roads which reduce the need for traffic to use Highway 3B/22. These roads include Columbia Avenue/the old bridge/Riverside Avenue, Fifth Avenue/Main Street and Highway Drive.
 - .6 Extend De Vito Road to link up with Highway 3B west of Old Waneta Road.
 - .7 Construct the proposed link between McBride and the secondary school and hospital. This will reduce traffic on the steep, winding section of the Highway between McBride and Fourth Avenue and provide an alternative access to the hospital in the event of Goepel/Hospital Hill being blocked.
 - .8 Consider the road classification/width system for new road construction as suggested in the 1999 Infrastructure Study. Variations in this classification system may be considered where standard road design widths are impractical (e.g. West Trail residential area).
 - .9 Work with the Ministry of Transportation and Highways to implement a traffic counting program to monitor growth in traffic at key locations and to assist in future planning for the road network.

- .10 Work with the RCMP and the Ministry of Transportation and Highways to implement an accident database to facilitate identification of trends in accidents by location, type and cause to assist in defining beneficial road upgrading initiatives.
- .11 Work with the Ministry of Transportation and Highways to consider implementing a major upgrade of Highway 3B or provide a new highway to bypass Trail.
- .12 Prioritize the road pavement rehabilitation projects as per the 1999 Infrastructure Study.
- .13 Further develop the existing pavement management system to provide the City with a solid data base with which to plan future road pavement upgrading projects.
- .14 Work with the Ministry of Transportation and Highways and Cominco Ltd. to plant trees below Cominco Ltd. on the south facing slope above Highway 3B. This would present a more positive entrance into the community.
- .15 Ensure that streetscape enhancement opportunities such as tree planting and sidewalk replacement are considered in conjunction with road upgrading projects.
- .16 Support efforts to improve the Waneta/Boundary International Border Crossing to accommodate 24-hour commercial truck traffic.
- .17 Work with the Ministry of Transportation and Highways to mitigate potential negative impacts including noise and increased maintenance costs associated with the 24-hour commercial border crossing.
- .18 Continue to work with the Ministry of Transportation to promote and ensure safe and convenient access between Highway 3B, Highway 22A, and Waneta Junction properties.
- .19 Require the development of the supporting roadway network identified in the Waneta Junction Conceptual Road Network Plan (Schedule F).
- .20 Encourage site connectivity through cross-access agreements and comprehensive site planning.
- .21 Support and encourage shared parking accommodations to reduce the land area requirements for paved parking stalls.
- .22 Support and encourage the advancement of streetscape and beautification initiatives within all roadway rights-of-way within the Waneta Junction area.
- .23 Continue to work with BC Transit to promote strong and frequent transit service provision to the Waneta Junction area.
- .24 Develop and promote a cyclist corridor and connection from the Waneta Junction area to the City Centre.
- .25 Require pedestrian connectivity corridors within the Waneta Junction area. These may include sidewalks, trails, or other pedestrian pathways.

9.3 Public Transit – General Policies

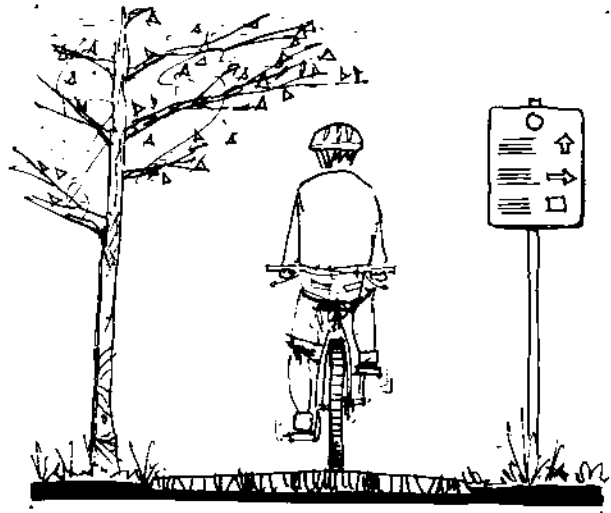
Council's policies are as follows:

- .1 Support existing public transit services at present levels or, if possible, enhanced.
- .2 Work with BC Transit to make public transit service within the City of Trail more efficient. Specific consideration should be given to increasing bus services on the weekends.
- .3 Work with the Greater Trail Community Health Council and BC Transit to make public transit more accessible to the physically challenged.

9.4 Pedestrian and Bicycle Transportation – General Policies

Council's policies are as follows:

- .1 Construct various footpaths according to the 1999 Infrastructure Study including:
 - A footpath from the foot of the stairs J.L. Crowe Secondary School down Hospital Hill/Goepel Street to link with the existing sidewalk on the east side of the road.
 - A footpath along the north side of Highway 3B between the link from Highway Drive and the existing access to the landfill site.



- .2 Complete the sidewalk replacement program as described in the 1999 Infrastructure Study and as identified in the City's 5-year Capital Plan. Priority replacement initiatives include sections of 5th Avenue, Glaser road and Riverside Avenue.
- .3 Continue to work with the physically challenged to improve wheelchair accessibility on street corners throughout the community but specifically within the Gulch Commercial Area, Downtown Commercial Area, and the East Trail Commercial Area.
- .4 Work with the Chamber of Commerce and local businesses to improve accessibility to and from private businesses within the community.
- .5 Work to widen the existing pathway along the Esplanade to improve accessibility for those physically challenged.

9.5 Airport – General Policies

Council's policies are as follows:

- .1 Work with the Regional District of Kootenay Boundary, Cominco and the user groups to examine the long-term future of the Trail Airport.
- .2 Work with the Regional District of Kootenay Boundary Economic Development Commission to prepare a strategy to promote the accessibility and availability of the Trail Airport to realize corporate and tourist opportunities.



LEGEND	CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
	— EXISTING ROADS	FIGURE: 5	Date: NOV. 2000
--- PROPOSED ROADS	BYLAW No. 2471		Dwg. No. 0846-mj-rd
	MAJOR STREET NETWORK PLAN		URBANSYSTEMS

10.0 INFRASTRUCTURE

10.1 Background

The City of Trail maintains an extensive water supply, treatment and distribution system. The system serves most of the developed urban areas of the City.

The City of Trail's sanitary sewer system generally consists of a series of gravity collection pipe networks which discharge to a regional system that also serves the adjacent municipalities of Rossland and Warfield. The regional system is collectively referred to as the Columbia Pollution Control System and is owned by the Regional District of Kootenay Boundary but is operated under contract by the City of Trail.

The City also maintains a storm water management system that consists of a network of gravity piping connecting catch basins and storm water inlets throughout the developed area, and discharging to the Columbia River. Several creek systems in both East and West Trail are confined within culverts and conveyed underground to the Columbia River.

10.2 Infrastructure – General Policies

Council's policies are as follows:

- .1 Ensure water, sewer, drainage systems, solid waste disposal facilities, and street lighting are provided to support the good health of Trail residents.
- .2 Ensure water, sewer, drainage systems, solid waste disposal facilities, and street lighting comply with the recognized need, servicing standards, and the ability of residents to pay.
- .3 Require where practical, that all development be connected to municipal water and sanitary sewer services.
- .4 Consider enhancement opportunities associated with prioritized infrastructure improvements. Examples include sidewalk replacement, tree planting, and trail construction.
- .5 Where practical, Council maintain the large rock retaining walls in the City that are deemed to be of heritage value in their original condition, and consider continuing with the style and character of their construction when repairs or replacement is necessary.

10.3 Water System

Council's policies are as follows:

- .1 Replace water distribution piping that is considered too small for adequate fire flow purposes as detailed in the 1999 Infrastructure Study.
- .2 Implement an active valve exercise program to ensure that valves operate properly when needed.
- .3 Construct a supply main, if necessary, along Highway 22, connecting to the distribution system on the high pressure side of the Rossland Avenue Booster Pump Station to supply the neighbourhood of Tadanac with water.
- .4 Replace water mains as per the priority system identified in the 1999 Infrastructure Study.
- .5 Undertake a water consumption assessment to quantify potential system leakage.

10.4 Wastewater System

Council's policies are as follows:

- .1 Continue to implement the root cutting program to eliminate root intrusion in vitrified clay pipes.
- .2 Continue to replace collapsed cess pits in Tadanac with the new wastewater collection and pump station system to discharge effluent to the Regional District's Columbia Pollution Control System.
- .3 Replace sewer mains in the priority order indicated in the 1999 Infrastructure Study.
- .4 Continue to identify and address cross connections in West Trail as part of the City's ongoing strategy to reduce the downstream impacts of extraneous water in the collection system.
- .5 Identify alternative approaches to avoid the discharge of sewage directly into the Trail Creek culvert in the West Trail.
- .6 Participate with the Regional District of Kootenay Boundary in the liquid waste management plan process.

10.5 Storm Water System

Council's policies are as follows:

- .1 Construct new storm water collection piping in West Trail where cross connections exist.
- .2 Continue improvements to the Trail Creek and Gorge Creek culverts to more efficiently address flood situations.
- .3 Redirect several wastewater collection pipes that flow directly through the Trail Creek and Gorge Creek culverts and are very vulnerable to damage and thus failure.
- .4 Repair sections of the McQuarrie Creek culvert and investigate the source of sediment from the hospital and high school hill side slopes which is entering the culvert and causing erosion.
- .5 Review the storm trunk sewer that services the area around Fifth Avenue and McQuarrie Street.
- .6 Upgrade the street drainage and sewer that are under capacity as per the 1999 Infrastructure Study.

11.0 COMMUNITY ENHANCEMENT

11.1 Background

The Official Community Plan surveys revealed strong support for enhancement of a number of key areas within the community. Specific areas of concern included the Gulch, the Downtown, West Trail and East Trail neighbourhoods. Respondents indicated a need to present a more positive image to the tourist for economic development reasons. It is also important to reinvest in the community to maintain resident pride in the community.

To this end the Official Community Plan supports the preparation of a Community Enhancement Plan. The Plan will prioritize enhancement projects and provide a long-term strategy to pay for improvements.

11.2 Community Enhancement – General Policies

Council's policies are as follows:

- .1 Prepare a Community Enhancement Strategy to examine the following issues in an effort to facilitate visually appealing and appropriate redevelopment:
 - Appropriate phasing of enhancement projects considering financial viability, priority and community benefit;
 - Realistic and flexible design guidelines that achieve the desired architectural form without passing on unnecessary costs to the developer;
 - Consistent directional signage within Trail that identifies the location of key community features;
 - Focus on pedestrian safety, accessibility, interest and comfort;
 - Additional tree planting and hydro seeding to improve the aesthetics and the livability of travel corridors and riverbanks;
 - Interpretive features to remember the heritage of the area;
 - Reinforce the importance of various cultural and historical buildings including St. Anthony's Catholic Church and the Colombo Lodge;
 - Identify suitable parcels of land to accommodate off-street public parking; and
 - Identify shared access opportunities on major routes including Rossland Avenue and 2nd Avenue.
 - Building façade improvements;
 - Opportunities for easily accessible and usable public gathering spaces;
 - Opportunities for public art;
 - Preserve and enhance views of the Columbia River;
 - Identify appropriate gateway treatments that reflect the unique character of the area and evoke a sense of neighbourhood pride.
 - Streetscape improvements designed to improve accessibility, safety and aesthetic quality. Improvements could include additional sidewalks, street lighting and street tree planting.
- .2 Community Enhancement projects will be prioritized based on need, benefit and cost.
- .3 Explore alternative funding sources to finance such projects.

12.0 MUNICIPAL BOUNDARIES

12.1 Background

The City of Trail is land starved. Extreme topography associated with the Columbia River Valley severely limits the ability of the City to accommodate additional residential or industrial growth. The Official Community Plan supports the consideration of boundary expansion to the south of the City of Trail. Additional study is required to determine the suitability of boundary expansion into this area.

12.2 Municipal Boundaries – General Policies

Council's policies are as follows:

- .1 Continue working with the residents and the property owners in the Regional District of Kootenay Boundary Area 'A' and Area 'B' to identify the feasibility, options, and costs associated with addressing servicing issues and joining the City of Trail.
- .2 Continue working with the Regional District of Kootenay Boundary to discuss boundary expansion issues and to cooperatively plan land uses and services in the fringe areas that may eventually become part of the City.
- .3 Require that an area become part of the City as a condition of the City extending municipal infrastructure to an area.

13.0

DEVELOPMENT PERMIT AREAS

13.1 Background

Pursuant to the Local Government Act, it is the policy of Council to designate certain areas of the City as Development Permit Areas and implement special conditions in the form of development guidelines. These designations and guidelines are used for the following reasons:

- Protection of the natural environment;
- Protection of development from hazardous conditions;
- Revitalization of an area in which a commercial use is permitted;
- Establishment of definitive objectives and to treat the form and character of commercial and multiple family residential development.

In general, within a Development Permit Area, the owner needs to obtain a development permit before:

- Subdivision;
- Construction, addition or alteration of a building or structure;
- Land is altered in an environmentally sensitive area as designated under Section 879(1)(a) of the Local Government Act;
- Land subject to hazardous conditions as designated under Section 879(1)(b) of the Local Government Act is altered.

13.2 Conditions where a Development Permit is not required

.1 Development Permits are not required within the specified Development Permit areas under the following conditions:

- For internal alterations which do not affect the outer appearance of the building.
- For replacement, upgrading or repair of roofing.

.2 Except in the Downtown Development Permit Area, Development permits are not required under the following conditions:

- For replacement upgrading or repair of the exterior cladding of a building
- For replacement upgrading or repair of signs
- For an alteration that is limited to the addition, replacement or alteration of doors, windows, or building trim.

13.3 Multi-Family Development Permit Area

Category

The Multi-Family Development Permit Area is designated under Section 879(1)(e) (form and character of multi-family development) of the Local Government Act.

Area

All areas designated Multi-Family Development Permit Area are illustrated on Figure 6.

Justification

Most multiple family developments are located in areas next to major roadways, areas next to lower density residential use, and areas in transition from lower density residential to higher density residential uses. Because of their prominent scale and location, multi-family developments can have a significant visual impact on the surrounding area. Good design guidelines can help ensure that the development enhances the surrounding area and contributes to the character of the neighbourhood.

The objective of this designation is to ensure that multi-family development is attractive and compatible with the surrounding area, as well as enhancing the overall character of Trail.

Guidelines

Development permits issued in this area shall be in accordance with the following guidelines:

Buildings and Structures

- .1 The siting, scale and massing of buildings should be consistent with adjacent development and prevailing neighbourhood character. Where larger multi-family developments meet single family residential developments, roof lines should slope down and building shapes should be stepped down to meet the height of the adjacent single family development.
- .2 Monolithic structures and long expanses of straight walls should be avoided. Second and third storeys should be stepped back, especially when adjacent to single storey developments.
- .3 Large buildings should be designed to create the impression of smaller units and less bulk by encouraging architectural treatments for roof systems, façade relief and variety between sections.
- .4 Materials such as brick, stucco, stone, natural stained or painted wood, or a combination of the above are encouraged.
- .5 Buildings clad entirely in vinyl siding are discouraged; if vinyl siding is used, it should be combined with significant amounts of other material in order to avoid expansive areas of featureless vinyl siding.
- .6 Clustering and other creative spatial arrangements with common open areas and facilities are encouraged. These types of housing should be designed to promote visual quality and interest, efficient use of land and building materials, community interaction and amenities, and natural drainage and environmental management systems.
- .7 Defined spaces should be identified for waste containers.

Access and Parking

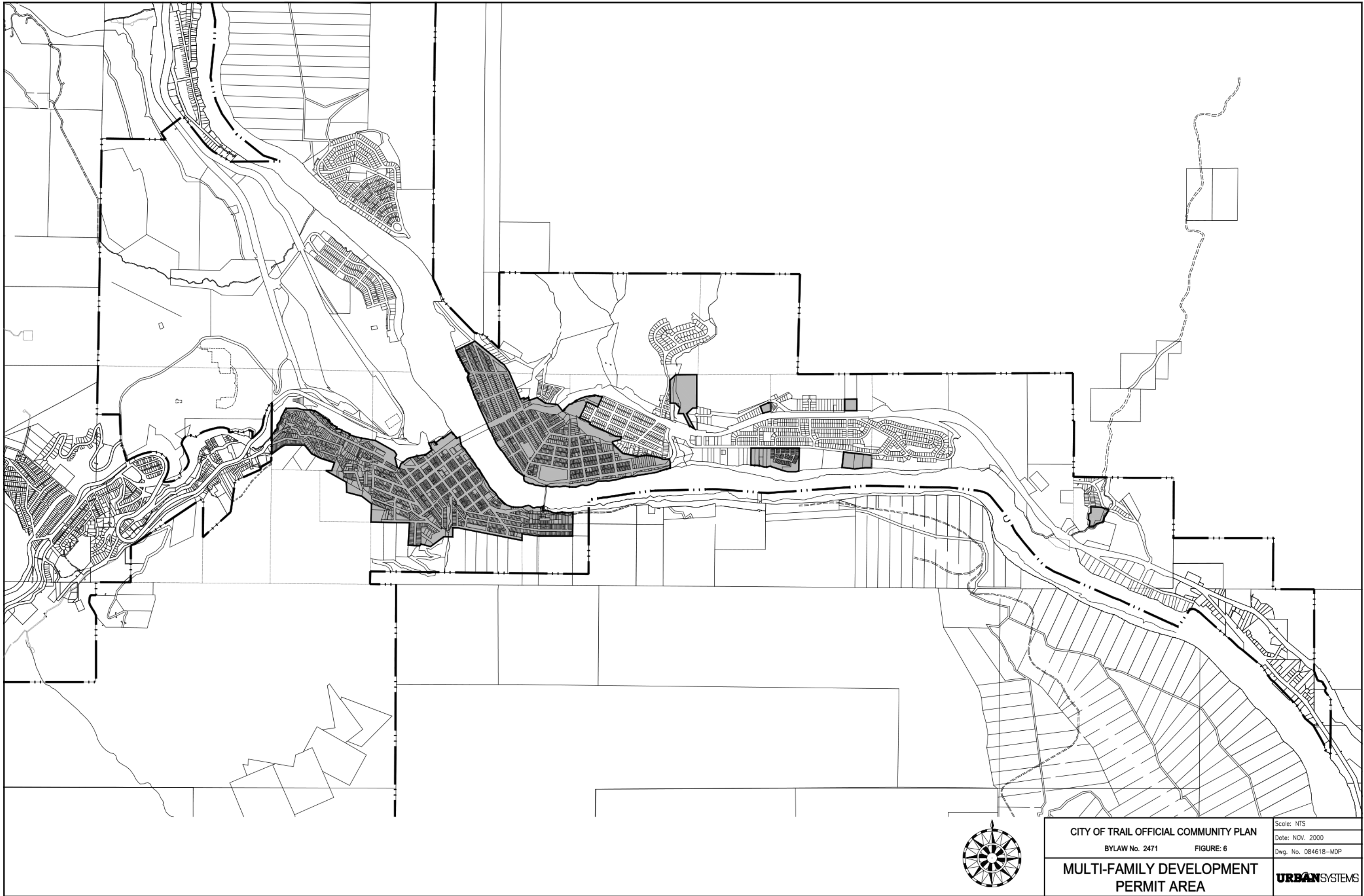
- .8 New development must provide safe and efficient vehicle entrances, exits and site circulation.
- .9 Sites should be designed to accommodate alternative modes of transportation, with provisions made onsite for sidewalks, bicycle and walking paths or lanes, and bicycle parking racks.
- .10 Large parking areas should be broken into smaller groups, with landscaping between the groups of parking.
- .11 Parking lots located at the side or rear of the principal building, rather than the front of the building, are encouraged.
- .12 Parking lots and access routes should be provided with asphalt, concrete, interlocking bricks or other hard surface. Gravel parking lots and access routes will not be accepted.

Screening and Landscaping

- .13 The site should be provided with landscaping in the following areas:
 - Along the property edge next to roadways;
 - Between buildings and parking areas;
 - Along on-site access roads;
 - Along the sides of buildings; and
 - In other open space areas not required for parking, access roads or walkways.
- .14 The site should be provided with supplementary screening in the form of fencing, hedging, planting, other screening materials or a combination of materials in the following areas:
 - Around outdoor storage areas;
 - Around waste containers;
 - Around heating and cooling equipment and other service areas; and
 - Between parking areas and the street.
- .15 The landscaping components should be designed as part of a comprehensive landscaping plan that complements the building and the surrounding uses.
- .16 The inclusion of site amenities that improve pedestrian enjoyment and accessibility and the quality of the residential living space is encouraged. Amenities may include courtyards, gardens, playground equipment, and pedestrian and bicycle routes.
- .17 Retention of significant existing vegetation is encouraged to enhance the urban environment and retain the existing character of the area.

Signage

- .18 The general character of signs should positively relate to the architectural character of the associated building.
- .19 Free standing signs should be low to the ground, externally lit or unlit, with a landscaped base.



Utility Servicing

.20 All multiple family development should be connected to a community water system and a community sewer system.

Sequence and Timing

.21 Sequence and timing will be considered for phased developments to encourage orderly development, identify priorities and facilitate completion of phases; in general initial phases should be near completion before subsequent phases are started .

13.4 Downtown Development Permit Area**Category**

The Downtown Development Permit Area is designated under Section 879(1)(d) (revitalization of an area in which a commercial use is permitted) of the Local Government Act.

Area

The areas designated Downtown Development Permit Area are illustrated on Figure 7.

Justification

The Downtown is the most important commercial area in the Trail region. The visual impression provided by the Downtown area helps shape the community's identity. It is also extremely important from an economic perspective to provide a strong positive image to the tourists travelling Highway 3B.

The objective of this designation is to enhance the quality, character, and image of Trail's downtown. The guidelines will ensure that a high standard of architectural and streetscape design are maintained. It is Council's objective to develop continuity and an overall improvement of the presentation of Downtown Trail, while still providing flexibility for original and inspired design.

Guidelines

.1 *The City of Trail Building Design Guidelines (1988)* shall apply within the Downtown Development Permit Area.

13.5 Gulch Development Permit Area

Category

The Gulch Development Permit Area is designated under Section 879(1)(d) (revitalization of an area in which a commercial use is permitted) of the Local Government Act.

Area

The areas designated Gulch Development Permit Area are illustrated on Figure 8.

Justification

The Gulch provides an important “first impression” for the City of Trail. The visual impression provided by the Gulch area helps shape the community’s identity. It is also extremely important from an economic perspective to provide a strong positive image to the tourists travelling Highway 3B.

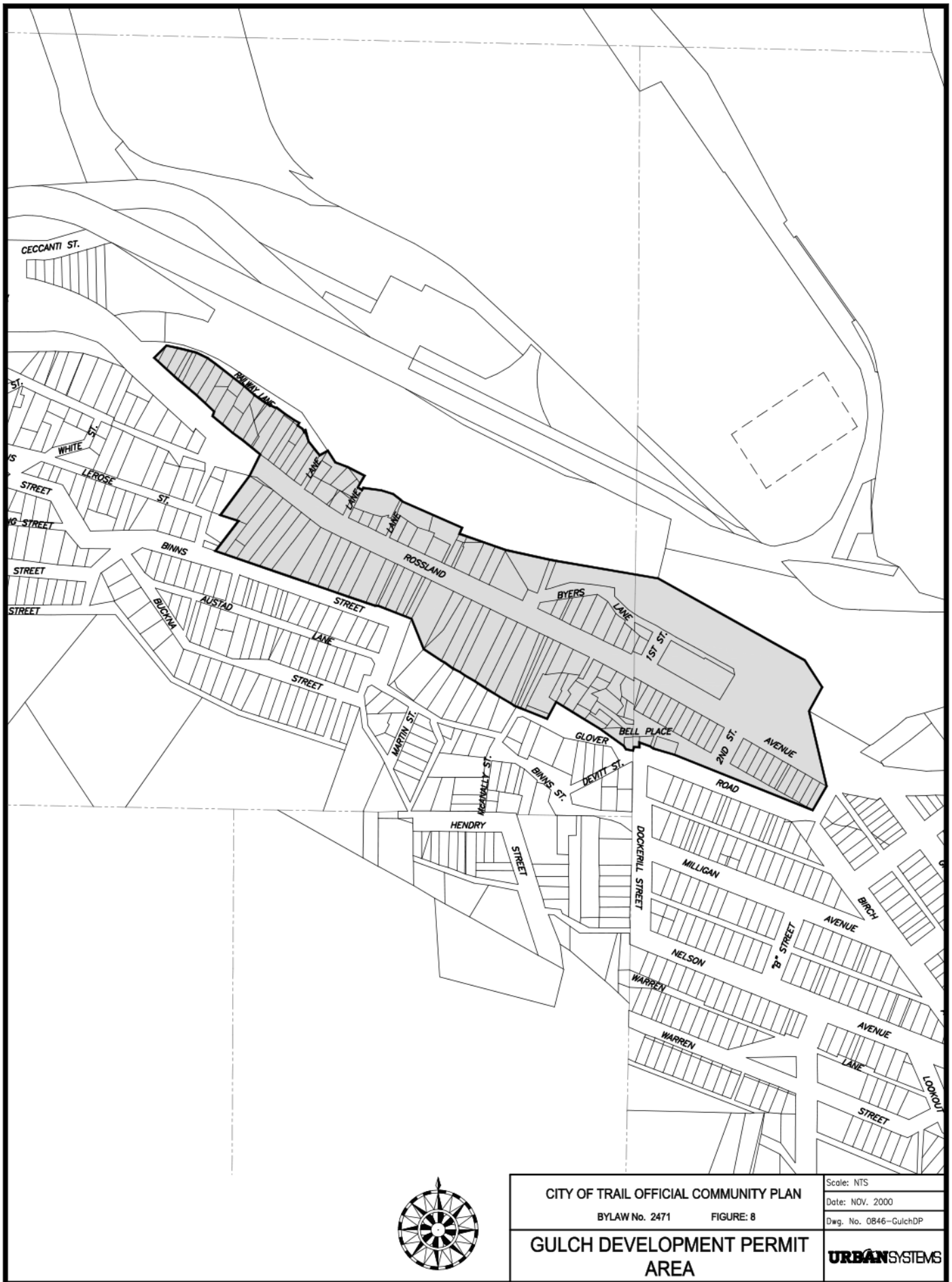
The objective of this designation is to enhance the existing quality, character, and image of the historic Gulch area. The guidelines will ensure that a high standard of architectural and streetscape design are maintained. It is Council’s objective to develop continuity and an overall improvement of the presentation of the Gulch, while still providing flexibility for original and inspired design.

Guidelines

- .1 *The City of Trail Building Design Guidelines (1988)* shall apply within the Gulch Development Permit Area.



CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
BYLAW No. 2471	FIGURE: 7	Date: NOV. 2000
DOWNTOWN DEVELOPMENT PERMIT AREA		Dwg. No. 084618-DP8
		URBAN SYSTEMS



CITY OF TRAIL OFFICIAL COMMUNITY PLAN

BYLAW No. 2471

FIGURE: 8

**GULCH DEVELOPMENT PERMIT
AREA**

Scale: NTS

Date: NOV. 2000

Dwg. No. 0846-GulchDP

URBAN SYSTEMS

13.6 Hazardous Development Permit Area #1

Category

The Hazardous Development Permit Area #1 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #1 are illustrated on Figure 9.

Justification

This area is subject to landslip and erosion due to its proximity to the riverbank of the Columbia River.

Guidelines

Development permits issues in this area shall be in accordance with the following:

- .1 Site conditions of the area and the limited depth of the lots will require soil testing and foundation design by a Professional Engineer for any construction or approval of a development.
- .2 Adequate setback of a development from the riverbank shall be provided, subject to soil investigations by a Professional Engineer.

13.7 Hazardous Development Permit Area #2

Category

The Hazardous Development Permit Area #2 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #2 are illustrated on Figure 10.

Justification

This area is subject to possible landslip, erosion and periodic debris torrents resulting from Lawley Creek.

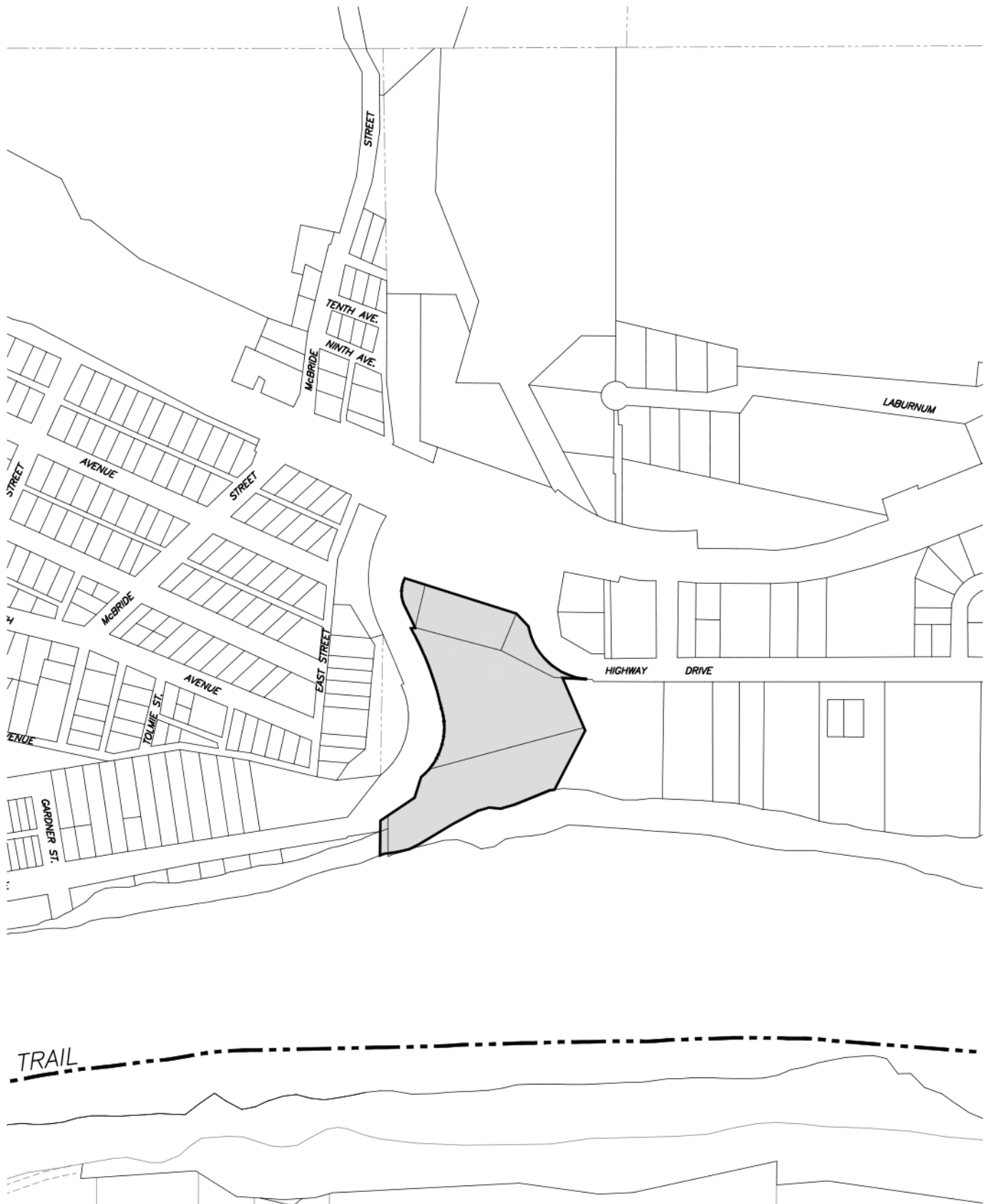
Guidelines

Development permits issues in this area shall be in accordance with the following:

- .1 Site conditions of the area will require soil testing and foundation design by a Professional Engineer prior to construction or approval of a development.
- .2 Works to control, channel or divert the waters of Lawley Creek are required, subject to the approval of the Ministry of Environment, Lands and Parks.



CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
BYLAW No. 2471	FIGURE: 9	Date: NOV. 2000
HAZARDOUS DEVELOPMENT PERMIT AREA #1		Dwg. No. 084618-DP1
		URBAN SYSTEMS



CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
BYLAW No. 2471	FIGURE: 10	Date: NOV. 2000
HAZARDOUS DEVELOPMENT PERMIT AREA #2		Dwg. No. 084618-DP2
		URBAN SYSTEMS

13.8 Hazardous Development Permit Area #3

Category

The Hazardous Development Permit Area #3 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #3 are illustrated on Figure 11.

Justification

This area is subject to landslip, erosion and periodic debris torrents from Lawley Creek.

Guidelines

Development permits issues in this area shall be in accordance with the following:

- .1 Site conditions including steepness of slopes and slope instability of the area will require soil testing and foundation design by a Professional Engineer prior to construction or approval of a development.
- .2 Works to control, channel or divert the waters of Lawley Creek are required, subject to the approval of the Ministry of Environment, Lands and Parks.

13.9 Hazardous Development Permit Area #4

Category

The Hazardous Development Permit Area #4 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #4 are illustrated on Figure 12.

Justification

This area is subject to erosion and landslip and could be subject to construction on fill material.

Guidelines

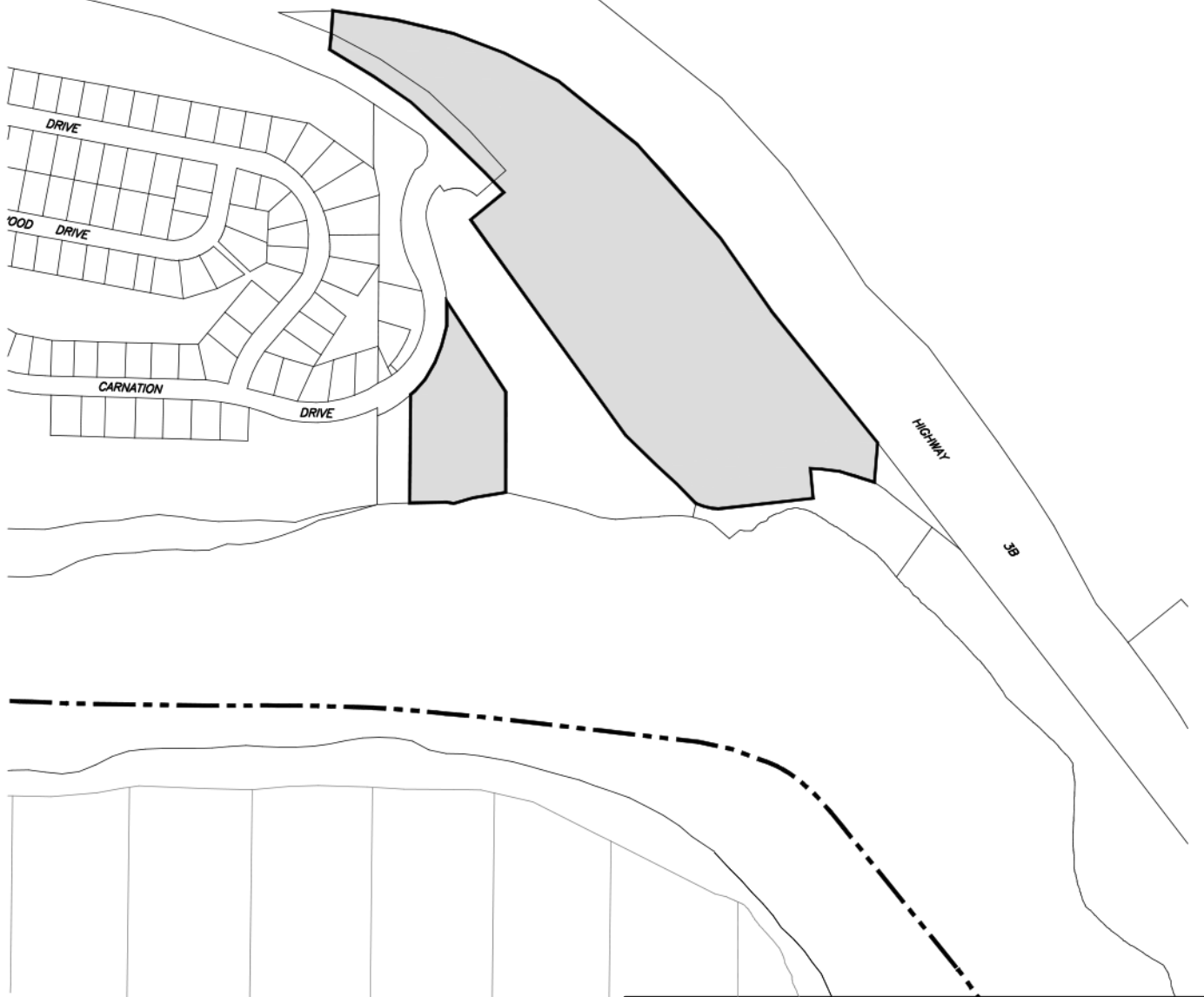
Development permits issues in this area shall be in accordance with the following:

- .1 Site conditions of the area will require soil testing and foundation design by a Professional Engineer prior to construction or approval of a development.
- .2 Works to control the creek through the area are required to minimize erosion and landslip, subject to the approval of the Ministry of Environment, Lands and Parks.



CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
BYLAW No. 2471	FIGURE: 11	Date: NOV. 2000
HAZARDOUS DEVELOPMENT PERMIT AREA # 3		Dwg. No. 084618-DP3
		URBAN SYSTEMS

CITY



CITY OF TRAIL OFFICIAL COMMUNITY PLAN		Scale: NTS
BYLAW No. 2471	FIGURE: 12	Date: NOV. 2000
HAZARDOUS DEVELOPMENT PERMIT AREA #4		Dwg. No. 084618-DP4
		URBAN SYSTEMS

13.10 Hazardous Development Permit Area #5

Category

The Hazardous Development Permit Area #5 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #5 are illustrated on Figure 13.

Justification

This area is subject to flooding, erosion and unstable drainage conditions.

Guidelines

Development permits issues in this area shall be in accordance with the following:

- .1 Site conditions require soil testing and surface and subsurface drainage analysis by a Professional Engineer prior to construction or approval of a development.
- .2 A detailed site plan is required prior to approval of a development.
- .3 A restrictive covenant is required saving the City harmless from damages resulting from any alteration to surface or subsurface drainage patterns, either in the development permit area or to lands in the vicinity.

13.11 Hazardous Development Permit Area #6

Category

The Hazardous Development Permit Area #6 is designated under Section 879(1)(b) (protection of development from hazardous conditions) of the Local Government Act.

Area

The areas designated Hazardous Development Permit Area #6 are illustrated on Figure 14.

Justification

This area is not serviced with a City sanitary sewer collection system and ground sewage disposal is required

Guidelines

Development permits issues in this area shall be in accordance with the following:

The Medical Health Officer and/or Public Health Inspector for the Central Kootenay Health Unit may be directed to consider for approval of the installation of wood-wet-well “cell pits” for ground sewage disposal in any new residential subdivision in the Development Permit Area #6 under the provisions for “alternate methods of sewage disposal” in the Provincial “Sewage Disposal Regulations” made pursuant to the Health Act.

Installations of such “cess pits” shall be in accordance with the following standards:



- .1 A building permit application shall clearly show the location of the proposed “cess pit” on Ministry of Health Application for a Permit to Construct a Sewage Disposal System, in compliance with item 8 and 9.
- .2 No building permit shall be issued until the required “sewage disposal permit” for the “cess pit” has been issued by the Public Health Inspector.
- .3 “Cess pit” wet-wells to be constructed of undressed 4” cedar lumber by City of Trail Works Department and installed by the City of Trail, in accordance with the City’s current practice.
- .4 “Cess pits” will be at least 6’ wide x 8’ long x 6’ deep – outside dimensions, or larger.
- .5 The outside perimeter cavity of the whole “cess pit” to be filled with drainage rock (1/8” to 4” in size containing less than 10% fines) to a width of at least 2 feet, with 6” of drain rock placed in the bottom of the “cess pit”.
- .6 “Cess pit” cover to be constructed of two overlapping layers of 2” undressed cedar lumber with an overlaying layer of 4 mil or thicker plastic.
- .7 The “cess pit” to be backfilled with at least 12” of earth to final grade.
- .8 The “cess pit” to be located in that portion of the lot which fronts the proposed or possible location of the future municipal sewer main.
- .9 Notwithstanding item 8., all new “cess pits” for newly created lots shall conform to the following Central Kootenay Health Unit requirements:
 - Be located at least 10 feet horizontal distance from any property line, waterline, driveway, sidewalk, planter, tennis court and like fixed normal site improvements; and
 - Be located at least 15 feet horizontal distance from a building or part thereof; and
 - Be located at least 30 feet horizontal distance from the bank of a surface body of water and in-ground swimming pool or hot tub; and
 - Be located at least 100 feet horizontal distance from a surface body of water.
- .10 Maintenance of the “cess pit” shall be carried out by the City of Trail as required except that should the repairs involve driveways, structures, or improvements, the City shall undertake such repairs on a one-time basis only and the owner shall be responsible for future maintenance costs until the “cess pit” is replaced. The owner shall be requested to sign a restrictive covenant releasing the City from future maintenance costs.
- .11 Should the owner wish to place any structure, concrete or asphalt works, or any like improvement, within 20 feet of the outside of an existing “cess pit” the owner will then become responsible for any repairs to those improvements.



CITY OF TRAIL OFFICIAL COMMUNITY PLAN

BYLAW No. 2471

FIGURE: 13

**HAZARDOUS DEVELOPMENT
PERMIT AREA #5**

Scale: NTS

Date: NOV. 2000

Dwg. No. 084618-DP5

URBAN SYSTEMS



CITY OF TRAIL OFFICIAL COMMUNITY PLAN

BYLAW No. 2471

FIGURE: 14

**HAZARDOUS DEVELOPMENT
PERMIT AREA #6**

Scale: NTS

Date: NOV. 2000

Dwg. No. 084618-DP6

URBAN SYSTEMS

13.12 Waneta Junction Regional Commercial Development Permit Area

Council will designate a Waneta Junction Regional Commercial Development Permit Area, under Section 919.1(1)(d) (revitalization of an area in which a commercial use is permitted) and Section 919.1(1)(f) (establishment of objectives for the form and character of commercial, industrial or multi-family residential development) of the Local Government Act.

The purpose of such a designation is to ensure a high standard of architectural and streetscape design, to enhance the quality of development at Trail's eastern gateway.

Potential guidelines could address any or all of the following:

- Building form and character
- Edge conditions
- Access
- Parking
- Streetscape treatment
- Landscaping
- Amenities
- Signage
- Lighting
- Garbage and recycling facilities

14.0 IMPLEMENTATION

The act of stating community goals and objectives does not guarantee their realization. An implementation program is needed to effectively transform the aspirations of the community into reality. The following table describes the key action items needed to help achieve the objectives of the Plan. Each action item has been derived from policy statements of the various land use designations and provisions of the plan.

Start dates corresponding to each action item have been included in the table to ensure a level of accountability between local government and the community. Action items have been prioritized based on community need and budgetary constraints.

This program should be reviewed regularly and adjusted to account for changing situations.

Implementation Program			
Action Item	OCP Reference	Start Date	Key Participants
Implement infrastructure improvements	Sections 9.2.2, 9.2.12, 9.4.2, 10.3.4, 10.4.3, 10.5.6	Ongoing	City of Trail
Initiate Boundary Restructure Study	Sections 7.5.2, 12.2	2001	City of Trail, RDKB
Prepare Violin Lake Master Plan	Section 7.7.3	2001	City of Trail, Ministry of Environment, Lands & Parks, and others
Update Zoning Bylaw	Sections 7.1.8, 7.1.5.2, 7.1.5.8	2001	City of Trail
Downtown Revitalization	Section 6.3.2.5	2001	City of Trail, merchants
Update Subdivision Servicing Bylaw	No specific OCP section In general it is good practice to update the subdivision servicing bylaw to reflect the goals & desires of the OCP	2002	City of Trail
Waneta Junction neighbourhood planning process	Section 6.11.2	2002	City of Trail
Prepare Community Enhancement Strategy	Section 11.2	2002	City of Trail
Prepare Parks and Recreation Master Plan	Section 7.6.3	2002	City of Trail, user groups, interest groups
Gulch Revitalization	Sections 6.1.2.8, 7.3.3.6	2002	City of Trail, merchants
Prepare Trails Systems Strategy	Section 7.6.3.1	2002	City of Trail, user groups, interest groups
East Trail Revitalization	Section 6.4.2.7, 7.3.5.10	2005	City of Trail, merchants

CITY OF TRAIL
OFFICIAL COMMUNITY PLAN
Land Use Map
Schedule 'B'

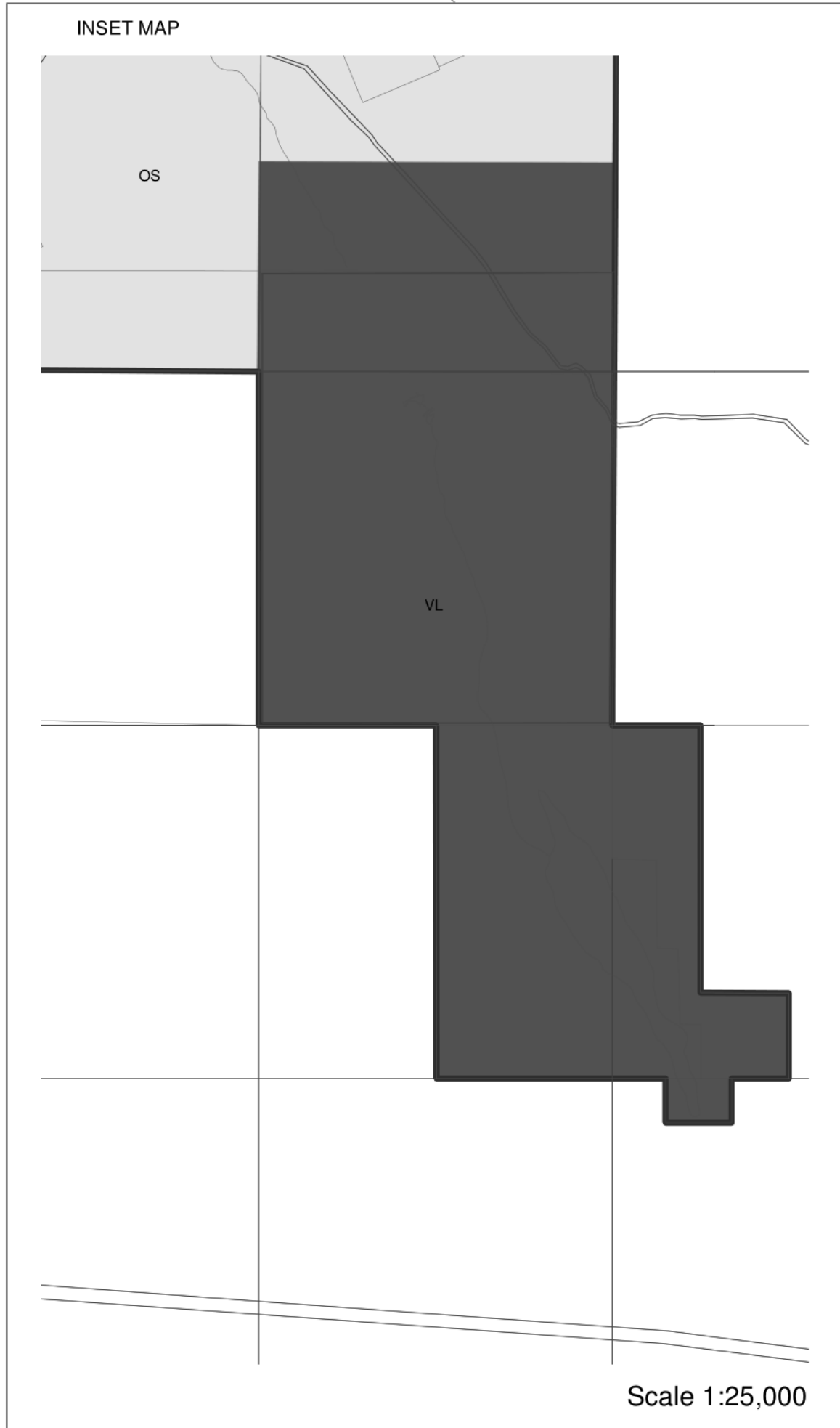


Legend

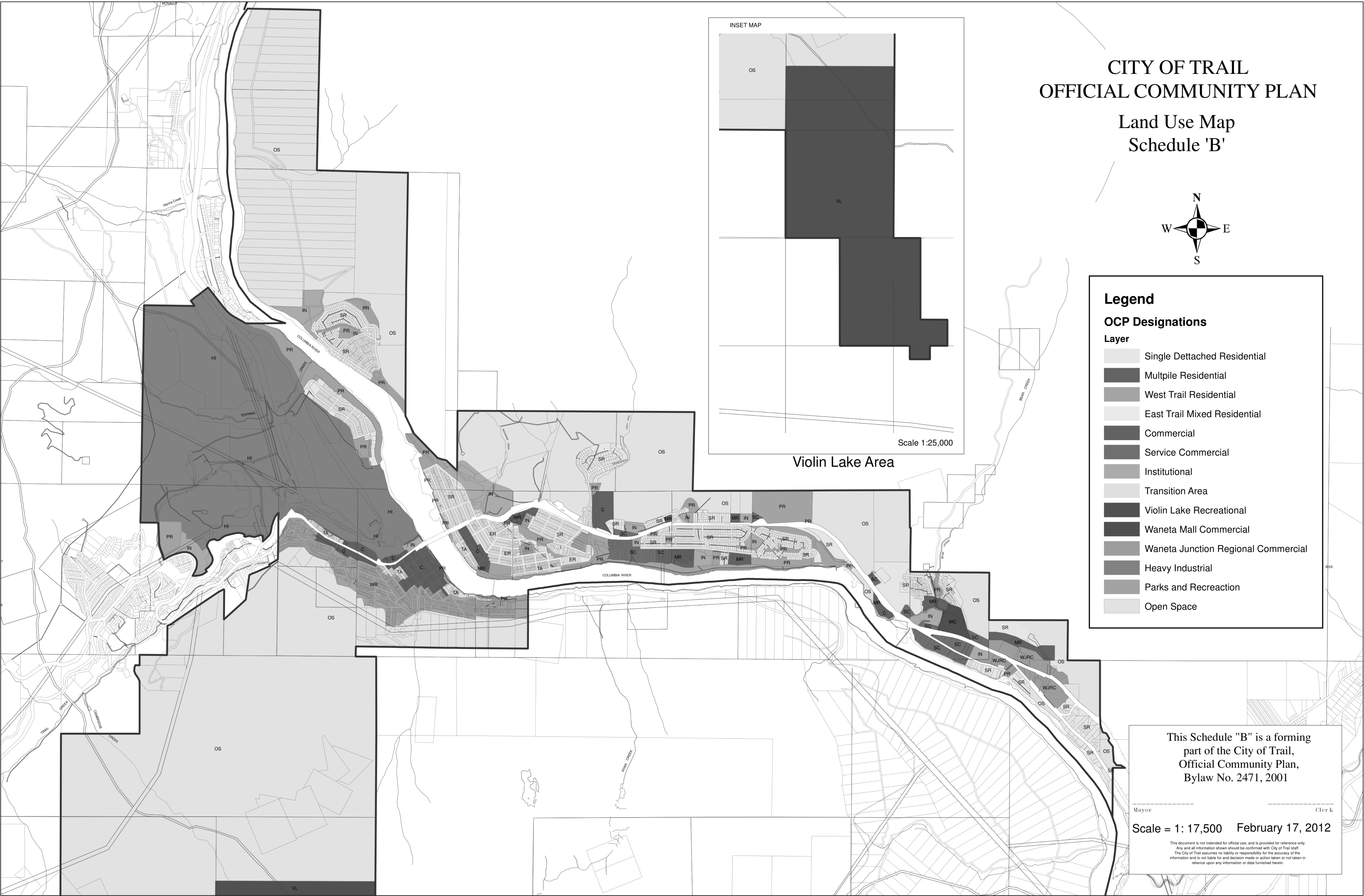
OCP Designations

Layer

- Single Dettached Residential
- Multipile Residential
- West Trail Residential
- East Trail Mixed Residential
- Commercial
- Service Commercial
- Institutional
- Transition Area
- Violin Lake Recreational
- Waneta Mall Commercial
- Waneta Junction Regional Commercial
- Heavy Industrial
- Parks and Recreation
- Open Space



Violin Lake Area



This Schedule "B" is a forming
part of the City of Trail,
Official Community Plan,
Bylaw No. 2471, 2001

Mayor _____ Clerk _____

Scale = 1: 17,500 February 17, 2012

This document is not intended for official use, and is provided for reference only.
Any and all information shown should be confirmed with City of Trail staff.
The City of Trail assumes no liability or responsibility for the accuracy of the
information and is not liable for any decision made or action taken or not taken in
reliance upon any information or data furnished herein.



City of Trail

Office of the Mayor

File #0530-02

10 July 2018

Ministry of Forests, Lands and Natural Resource Operations
and Rural Development
PO Box 9049 Stn Prov Govt
Victoria, BC V8W 9E2

To Whom it May Concern:

RE: LETTER OF SUPPORT

On behalf of Trail City Council, I am pleased and excited to be writing this letter of support for the Rural Dividend Fund application, “Metal Tech Alley 4.0 – Sustainability in a Circular Economy” submitted by the Lower Columbia Development Team Society (LCCDTS) and will be administered by its wholly owned subsidiary, the Lower Columbia Initiatives Corporation (LCIC). The LCCDTS has a mission to inspire regional solutions; this application shows the depth of the organization’s ability to collaborate on a regional scale, creating an extraordinary region to work, invest and live.

The City of Trail is a local government and the largest incorporated municipality in the Greater Trail region. The City of Trail contracts directly with the LCCDTS and LCIC to provide economic development services to the City. Trail Council recognizes the benefits of better understanding the supply chain issues that are emerging as the Metal Tech alley initiative continues to expand. The approval of the grant will provide the necessary resources to facilitate the further collection of information and the development of the maps and plans specified. The creation of future regional economic opportunities, diversification and sustainable growth remain important priorities for Council and are consistent with the goals of the Rural Dividend Fund.

Based on learnings from the previous application this project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions (creating a



Circular Economy) while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial Recycling. Recognizing in order to ensure future success for the metaltechalley initiative this project will also research sustainability funding models and create a viable sustainability plan that best suits our needs and the needs of the metaltechalley program.

Some of the activities include:

- Development of a regional Supply Chain map.
- Research and develop a metaltechalley sustainability plan.
- Research, development and commercialization of by-products.
- Hosting a metaltechalley conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new and innovative markets ensuring the region's economy is diversified and sustainable, both at the business and community levels; ultimately positioning us for success as global leaders in the metals and technology markets which in turn builds confidence in our economy and allows us to compete in the very competitive market of investment attraction.

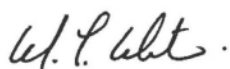
Continued exposure for the region and these sectors will build global connections resulting in opportunities, referrals, stronger partnerships and/or requests for services, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy ultimately ensuring workforce retention.

Economic growth, diversity and stability are essential to the sustainability of rural communities; our residents benefit when our economic drivers remain healthy and more diverse. Approval of this application will ensure economic growth in all our communities and build confidence in potential investors considering investing in our community.

We are grateful for this Provincial Economic Development stream of funding and, as with LCCDTS's mission and the Rural Dividend Fund's goals, this project contributes to the strength and sustainability of our communities. In turn, this will make the Lower Columbia region a more attractive place to live and work. This is a worthy project that helps retain our youth, grow and diversify our economy by using innovation, and develop new partnerships to ensure prosperity. The City of Trail recommends approval of the application.

Thank you for considering this application.

Regards,



Mike Martin
Mayor

July 23, 2018

Ministry of Forests, Lands and Natural Resources
Rural Advisory Committee
Victoria, BC

To Whom It May Concern,

On behalf of Community Futures Greater Trail, I am pleased and excited to be writing this letter of support for the Rural Dividend Fund application, **"Metal Tech Alley 4.0 – Sustainability in a Circular Economy"** submitted by the Lower Columbia Development Team Society (LCCDTS). This project will be administered by its wholly owned subsidiary, the Lower Columbia Initiatives Corporation (LCIC). The LCCDTS has a mission to inspire regional solutions; this application shows the depth of the organization's ability to collaborate on a regional scale, creating an extraordinary region to work, invest and live.

Community Futures Greater Trail is a community-driven organization that promotes, coordinates and implements a variety of economic development initiatives, business loans, training and the Self Employment program in our region. We serve the residents of Trail, Rossland, Warfield, Genelle, Montrose, Fruitvale and Areas A & B of Kootenay Boundary Regional District and we partner with various provincial and federal agencies as well as the LCIC and LCCDTS to develop new socioeconomic opportunities.

Based on learnings from the previous application, this project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions (creating a Circular Economy). At the same time the project will continue to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies, IIoT, Big Data and Industrial Recycling. In order to ensure future success for the metaltechalley initiative, this project will also research funding models and create a viable sustainability plan that best suits the needs of the metaltechalley program.

Some of the activities include:

- Development of a regional Supply Chain map.
- Research and develop a metaltechalley sustainability plan.
- Research, development and commercialization of by-products.
- Hosting a metaltechalley conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new and innovative markets ensuring the region's economy is diversified and sustainable, both at the business and community levels. This will ultimately position us for success as global leaders in the metals and technology markets which in turn helps build confidence in our economy and allows us to compete in the very competitive market of investment attraction.

Continued exposure for the region will build global connections resulting in opportunities, referrals, stronger partnerships and/or requests for services, which in turn will build a diverse economy, leaving residents with a sense of community pride and confidence in the local economy ultimately ensuring workforce retention.

Economic growth, diversity and stability are essential to the sustainability of rural communities. Our residents benefit when our economic drivers remain healthy and more diverse. Approval of this application will ensure economic growth in all our communities and build confidence in potential investors considering investing in our community.

This is a worthy project that helps retain our youth, grow and diversify our economy by using innovation, and develop new and partnerships to ensure prosperity. Community Futures Greater Trail recommends approval of the application.

Thank you for supporting this application.

Sincerely,

A handwritten signature in black ink, appearing to read 'Erik Kalacis', with a stylized circular flourish at the beginning.

Erik Kalacis
Executive Director
Community Futures Greater Trail



File No: 0110.05

OFFICE OF THE MAYOR

July 9, 2018

Ministry of Forests, Lands and Natural Resources
Rural Advisory Committee
Victoria, BC

Dear Selection Committee,

On behalf of Rossland City Council, I am pleased to provide this letter of support for the Rural Dividend Fund application, "Metal Tech Alley 4.0 – Sustainability in a Circular Economy" submitted by the Lower Columbia Development Team Society (LCCDTS). The LCCDTS' mission is to inspire regional solutions for economic development. This application shows the depth of the organization's ability to collaborate on a regional scale, creating an extraordinary region in which to work, invest and live.

The City of Rossland is a small, rural community that must continually reinvent itself to stay viable. We strive to attract new residents who bring their skills and talents with them to the interior of BC. The ongoing development, expansion and success of Metal Tech Alley is essential to this effort.

This project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain; identifying the gaps and researching viable business solutions (creating a Circular Economy) while continuing to globally position our region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial Recycling. In order to ensure the future success of the Metal Tech Alley initiative, this project will also research sustainability funding models that best suits the needs of the Metal Tech Alley program and our region.

Some of the activities will include:

- Development of a regional supply chain map.
- Research and develop a Metal Tech Alley sustainability plan.
- Research, development and commercialization of by-products.

Phone 250 362 7396 Fax 250 362 5451
Email cityhall@rossland.ca Web rossland.ca

1899 Columbia Avenue, PO Box 1179, Rossland, BC V0G 1Y0, Canada

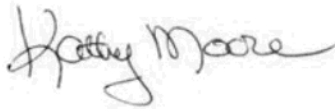
- Hosting a Metal Tech Alley conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new markets, ensuring the region's economy is diversified and sustainable. Continued exposure for the region and these sectors will build global connections resulting in opportunities and stronger partnerships.

We are grateful for this Provincial economic development funding. It is in alignment with the LCCDTS's mission and the Rural Dividend Fund's goals to contribute to the strength and sustainability of our communities. In turn, this will make the Lower Columbia region a more attractive place to live and work. This is a worthy project that helps retain our youth, grow and diversify our economy by using innovation, and develop new and partnerships to ensure prosperity. The City of Rossland recommends approval of the application.

Thank you for considering this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Harry Moore". The signature is fluid and cursive, with the first name "Harry" and the last name "Moore" clearly distinguishable.

Mayor



July 28, 2018

Ministry of Forests, Lands and Natural Resources
Rural Advisory Committee
Victoria, BC

I4C Innovation is pleased and excited to provide this letter of support for the Rural Dividend Fund application, “Metal Tech Alley 4.0 – Sustainability in a Circular Economy” submitted by the Lower Columbia Development Team Society (LCCDTS) and will be administered by its wholly owned subsidiary, the Lower Columbia Initiatives Corporation (LCIC). Through past projects, the LCCDTS has proven its ability to deliver on the mission to inspire regional solutions. The current application utilizes the organization’s ability to collaborate on a regional scale, creating an extraordinary region in which to work, invest and live.

I4C Innovation Inc. is experienced in partnership with LCIC as we near the completion of our existing RDF project. I4C has undergone extensive growth in our first year of operations and has benefited from the work of Metal Tech Alley by being able to leverage our geographical location within the region to attract businesses to join the technology hub. The technology partners of i4C contribute a wide range of skills and products that provide viable solutions to the rapidly changing problems facing big industry.

Based on learning outcomes from the previous project, the proposed project is focused on driving innovation in advanced materials and technology sectors. The focus will be achieved through

- understanding, inventorying and mapping the region’s supply chain
- identifying gaps and researching viable business solutions (creating a Circular Economy)
- continuing to globally position the region as a centre of excellence in
 - metallurgy and advanced materials,
 - digital technologies and IIoT & Big Data
 - Industrial Recycling.

Recognizing that, to ensure future success for the metaltechalley initiative, this project will also research sustainability funding models and create a viable sustainability plan that best suits the needs of local businesses and the needs of the metaltechalley program.

Some of the activities include:

- Development of a regional Supply Chain map.
- Research and develop a metaltechalley sustainability plan.
- Research, development and commercialization of by-products.
- Hosting a metaltechalley conference in 2020.



- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to the economic growth of rural communities and allows the rural communities to compete in new and ever-changing markets. Ensuring the region's economy is diversified and sustainable, at both the business and community levels, positions regional businesses for success as global leaders in the metals and technology markets. This in turn builds confidence in our economy and allows us to succeed in the very competitive market of investment attraction.

Continued exposure for the region and these sectors builds global connections resulting in opportunities, referrals, stronger partnerships and requests for services, which in turn builds a diverse economy where residents enjoy an enduring sense of pride in their community and confidence in their local economy ultimately ensuring workforce retention.

Economic growth, diversity and stability are essential to the sustainability of rural communities; area residents benefit when economic drivers remain healthy and more diverse. Approval of this application will ensure economic growth in the area communities and will also enhance investor confidence in the region and its communities.

We are grateful for this Provincial Economic Development funding stream and, as with LCCDTS's mission and the Rural Dividend Fund's goals, the proposed project contributes to the strength and sustainability of our communities. In turn, the Lower Columbia region will have an enhanced profile as an attractive place to live and work. The proposed project is worthy of our support because the outcomes are designed to retain our youth, to grow and diversify our economy through innovation, and to develop and enhance new and existing partnerships and to ensure regional prosperity. I4C Innovation Inc. has agreed to financially and in-kind support the proposed project and further recommends approval of the application.

Thank you for considering the application of the proposed MetalTechAlley project.

Respectfully,

A handwritten signature in black ink, appearing to read 'Pilar Portela'.

Pilar Portela
CEO, i4c Innovation Inc.

PP/cl

July 6, 2018

Fenix Advanced Materials Inc.
2950 Highway Drive
Trail, BC V1R 2T3
don@fenixam.com



Dear Mr. Freschi

Re: Support for Rural Dividend Fund Application

Through the administration of the economic development office, LCIC; The Lower Columbia Community Development Team Society (LCCDTS) is submitting a partnership application for the Provincial Rural Dividend Fund called "Metal Tech Alley 4.0 – Sustainability in a Circular Economy" through the Business Sector Development stream. Based on learnings from the previous application this project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions (creating a Circular Economy) while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial Recycling. Recognizing in order to ensure future success for the *metatechalley* initiative this project will also research sustainability funding models and create a viable sustainability plan that best suits our needs and the needs of the *metatechalley* program.

We are requesting an investment of \$25,000 a year for two years from Fenix to support us in undertaking key activities that will stimulate and drive sustainable economic development in the metals and technology sectors within the communities of the Lower Columbia Region.

Some of our activities include:

- Development of a regional Supply Chain map.
- Research and develop a *metatechalley* sustainability plan.
- Research, development and commercialization of by-products.
- Hosting a *metatechalley* conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new and innovative markets ensuring the region's economy is diversified and sustainable, both at the business and community levels; ultimately positioning us for success as global leaders in the metals and technology markets which in turn builds confidence in our economy and allows us to compete in the very competitive market of investment attraction.

With private, public and municipal support our application is better positioned for acceptance and having Fenix as one of our private partners would be integral in getting this application approved.

If you have any questions or need any other information for this request please do not hesitate to contact me.
tvanhorn@lcic.ca or 250-364-6461.

Thank you for your consideration!

Respectfully,

Terry Van Horn
Economic Development Officer, LCIC
tvanhorn@lcic.ca
250-364-6461

APPROVED
JULY 26/18
DON FRESCHI
CEO
FENIX



Kootenay Association for Science and Technology
2950 Highway Drive,
Trail, BC V1R 2T3

Ministry of Forests, Lands and Natural Resources
Rural Advisory Committee
Victoria, BC

July 28, 2018

On behalf of the Kootenay Association for Science and Technology (KAST), I am pleased and excited to be writing this letter of support for the Rural Dividend Fund application, “Metal Tech Alley 4.0 – Sustainability in a Circular Economy” submitted by the Lower Columbia Development Team Society (LCCDTS) and will be administered by its wholly owned subsidiary, the Lower Columbia Initiatives Corporation (LCIC). The LCCDTS has a mission to inspire regional solutions; this application shows the depth of the organization’s ability to collaborate on a regional scale, creating an extraordinary region to work, invest and live.

KAST is a non-profit organization working to build a recognized, vibrant and prosperous technology community in the West Kootenay region of BC, by connecting and solving problems for entrepreneurs’. Metal Tech Alley 4.0 is an ideal fit with KAST’s overall mandate and would address many of the challenges KAST faces as a non-profit working to promote science and technology in our region. We are committed to the success of metaltechalley and have agreed to contribute \$50,000 in cash and \$6,200 worth of in kind support for business development expertise, program training, access to resources and mentors as well as help facilitate technology connections.

Based on learnings from the previous application this project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions (creating a Circular Economy) while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IoT & Big Data and Industrial Recycling. Recognizing in order to ensure future success for the metaltechalley initiative this project will also research sustainability funding models and create a viable sustainability plan that best suits our needs and the needs of the metaltechalley program.

Some of the activities include:

- Development of a regional Supply Chain map.
- Research and develop a metaltechalley sustainability plan.
- Research, development and commercialization of by-products.



- Hosting a metaltechalley conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new and innovative markets ensuring the region's economy is diversified and sustainable, both at the business and community levels; ultimately positioning us for success as global leaders in the metals and technology markets which in turn builds confidence in our economy and allows us to compete in the very competitive market of investment attraction.

Continued exposure for the region and these sectors will build global connections resulting in opportunities, referrals, stronger partnerships and/or requests for services, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy ultimately ensuring workforce retention.

Economic growth, diversity and stability are essential to the sustainability of rural communities; our residents benefit when our economic drivers remain healthy and more diverse. Approval of this application will ensure economic growth in all our communities and build confidence in potential investors considering investing in our community.

We are grateful for this Provincial Economic Development stream of funding and, as with LCCDTS's mission and the Rural Dividend Fund's goals, this project contributes to the strength and sustainability of our communities. In turn, this will make the Lower Columbia region a more attractive place to live and work. This is a worthy project that helps retain our youth, grow and diversify our economy by using innovation, and develop new and partnerships to ensure prosperity. KAST recommends approval of the application.

Thank you for considering this application.

Sincerely,

A handwritten signature in dark ink, reading 'Don Freschi' in a cursive script.

Don Freschi | Executive Director
Kootenay Association for Science and Technology

Carol Vanelli Worosz
Community Engagement Leader
carol.vanelliworosz@teck.com
Tel: 250 364-4113
Fax: 250 364-4144

Teck Metals Ltd.
Trail Operations
P.O. Box 1000, 25 Aldridge Avenue
Trail, BC Canada V1R 4L8

+1 250 364 4222 Tel
www.teck.com

Teck

July 17, 2018

Lower Columbia Community Development Team Society
c/o Ms. Terry Van Horn
Economic Development Officer, LCIC
tvanhorn@lcic.ca

Dear Terry:

Please find enclosed Teck Metals Ltd. Trail Operations' letter of support for the partnership grant application being submitted by the Lower Columbia Community Development Team Society (LCCDTS) and the Lower Columbia Initiatives Corporation (LCIC) through the BC Rural Dividend Fund, entitled *Metal Tech Alley 4.0 – Sustainability in a Circular Economy*.

Should the \$500,000 grant application be successful and the project moves forward, Teck Trail Operations will provide \$50,000 to the LCCDTS over 2019 and 2020. Please be aware; however, that we will define the individual payment values, and the related timing, over this two-year period.

I look forward to hearing from you in the future in terms of the success of the application process.

Yours truly,



Carol Vanelli Worosz
Community Engagement Leader

CAVW/sjr

Enclosure

Carol Vanelli Worosz
Community Engagement Leader
carol.vanelliworosz@teck.com
Tel: 250 364-4113
Fax: 250 364-4144

Teck Metals Ltd.
Trail Operations
P.O. Box 1000, 25 Aldridge Avenue
Trail, BC Canada V1R 4L8

+1 250 364 4222 Tel
www.teck.com

Teck

July 17, 2018

Lower Columbia Community Development Team Society
c/o Ms. Terry Van Horn
Economic Development Officer, LCIC
tvanhorn@lcic.ca

Dear Ms. Van Horn:

Reference: Lower Columbia Community Development Team Society and Lower Columbia Initiatives Corporation – 2018 BC Rural Dividend Fund Application (Fifth Intake)

On behalf of Teck Metals Ltd. Trail Operations, I am writing to express our support for the partnership grant application being submitted by the Lower Columbia Community Development Team Society (LCCDTS) and the Lower Columbia Initiatives Corporation (LCIC) through the BC Rural Dividend Fund, entitled *Metal Tech Alley 4.0 – Sustainability in a Circular Economy*.

Teck Trail Operations has committed to a sponsorship of \$50,000 over two years for this initiative that will drive innovation in the advanced materials and technology sectors.

As a community partner for over 120 years with an employee base of 1,450 people, we have been a member of the LCCDTS and the LCIC since both organizations were first established, as we recognize the importance of advancing the economic strength of the Lower Columbia Region by overseeing the growth and cooperative implementation of developmental initiatives important to the area.

Sincerely,



Carol Vanelli Worosz
Community Engagement Leader

CAVW/sjr

Selkirk College
301 Frank Beinder Way, Castlegar, BC V1N4L3

Ministry of Forests, Lands and Natural Resources
Rural Advisory Committee
Victoria, BC

July 28, 2018

On behalf of Selkirk College, I am pleased and excited to be writing this letter of support for the Rural Dividend Fund application, “Metal Tech Alley 4.0 – Sustainability in a Circular Economy” submitted by the Lower Columbia Development Team Society (LCCDTS) and will be administered by its wholly owned subsidiary, the Lower Columbia Initiatives Corporation (LCIC). The LCCDTS has a mission to inspire regional solutions; this application shows the depth of the organization’s ability to collaborate on a regional scale, creating an extraordinary region to work, invest and live.

In our strategic plan, “Beyond Imagination”, Selkirk College commits to inspiring lifelong learning, transforming lives through education, and serving our communities. One of our five pillars of success specifically describes the commitment to community engagement and innovation. And one of our five strategic directions calls us to expand our impact on community development and social innovation. In all of this work, the BC Regional Innovation Chair in Rural Economic Development (RIC) is a critical part of that existing vision as a locus of applied research and economic development capacity building. The RIC will provide a total of 12 days of research advisory and project advisory support valued @ \$800/day for a total in-kind contribution \$9,600.

Based on learnings from the previous application this project is focused on driving innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions (creating a Circular Economy) while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial Recycling. Recognizing in order to ensure future success for the metaltechalley initiative this project will also research sustainability funding models and create a viable sustainability plan that best suits our needs and the needs of the metaltechalley program.

Some of the activities include:

- Development of a regional Supply Chain map.
- Research and develop a metaltechalley sustainability plan.
- Research, development and commercialization of by-products.
- Hosting a metaltechalley conference in 2020.
- Continued relationship building with identified targeted professionals and businesses.

Innovation is essential to economic growth of rural communities and allows us to compete in new and innovative markets ensuring the region's economy is diversified and sustainable, both at the business and community levels; ultimately positioning us for success as global leaders in the metals and technology markets which in turn builds confidence in our economy and allows us to compete in the very competitive market of investment attraction.

Continued exposure for the region and these sectors will build global connections resulting in opportunities, referrals, stronger partnerships and/or requests for services, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy ultimately ensuring workforce retention.

Economic growth, diversity and stability are essential to the sustainability of rural communities; our residents benefit when our economic drivers remain healthy and more diverse. Approval of this application will ensure economic growth in all our communities and build confidence in potential investors considering investing in our community.

We are grateful for this Provincial Economic Development stream of funding and, as with LCCDTS's mission and the Rural Dividend Fund's goals, this project contributes to the strength and sustainability of our communities. In turn, this will make the Lower Columbia region a more attractive place to live and work. This is a worthy project that helps retain our youth, grow and diversify our economy by using innovation, and develop new and partnerships to ensure prosperity. Selkirk College recommends approval of the application.

Thank you for considering this application.



Dr. Terri MacDonald
BC Regional Innovation Chair in Rural Economic Development
Selkirk College

Instructions

- 1 Please fill in all fields marked with a red asterisk (*).
- 2 Use the "Tab" key to move from field to field in order, or the mouse to select any available (white-filled) field.
- 3 To paste copied information into a cell, you must double-click in the cell before pasting.

Note: do NOT use "Cut" (or Control-X) to remove information from a cell as this may make the application form unreadable. Use the Delete key to remove information; use "Copy" (or Control-C) to copy information for pasting in another location.**Note:** Mac users - do NOT use Numbers as the form will not function properly.
- 4 Some boxes have drop-down lists where you can select a value; for these boxes, click on the arrow that appears when your cursor is in the box, and select from the list.
- 5 Please attach completed Project Budget to your Application submission through the Rural Dividend website.

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

1. Project Information

Applicant Name (maximum 250 characters)

Lower Columbia Community Development Team Society (LCCDTS)

e.g. Timberlake Chamber of Commerce

Project Name (maximum 250 characters)

Metal Tech Alley 4.0 - Sustainability in Circular Economy

e.g., Timberlake Farmers' Market Stalls

Funding Stream (select from drop-down list):

Partnerships Project

Using the Program Guide definitions, select a funding stream from the list

Is this a Destination Trail Project? ☐yes

2. Project Costs

Provide a detailed breakdown of costs related to project implementation. Totals will be auto-calculated and used in later calculations.

Category	Description of Cost (REQUIRED) (maximum 250 characters)	Costs	Funding
Salary and Wages Provide the following information in the description of cost: • job title • wage rate • number of hours or months of employment • if position is existing or is for a new hire	Project Coordinator (\$60,000 per year)-30 hours per week for 91 weeks-New Hire	\$ 103,350	Rural Dividend
	By-Product Reseach Scientists (2x)-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)-New Hire	\$ 70,000	Rural Dividend
	Training Program Director - (\$25,000 per year)- \$24/hr for 15 hours a week for 104 weeks-New Hire	\$ 50,000	Other
	Marketing Coordinator - (\$25,000 per year)-\$24/hr at 15 hours per week for 104 weeks-New Hire	\$ 50,000	Rural Dividend
	Technology Services Coordinator- (\$10,000 per year) - \$24/hr for 8 hours per week for 104 weeks-New Hire	\$ 20,000	Other
	Sub-total	\$ 293,350	
Consulting and Professional Fees Provide the following information in the description of cost: • description of the service • name of the consultant / professional providing the service (if known) • length of the contract (may be an estimate)	Sustainability Funding Model Consultant-4 month	\$ 40,000	Rural Dividend
	Circular Economy Consultant- 5 month	\$ 50,000	Rural Dividend
	KASt-mentors, expertise, program support-ongoing	\$ 6,200	In-Kind
	Selkirk College-expertise and data research,program support-ongoing	\$ 4,600	In-Kind
	Teck-product development expertise-ongoing	\$ 9,590	In-Kind
	i4C-IIoT commercialization support-ongoing	\$ 5,000	In-Kind
	Lab testing and analysis from outside services-as needed	\$ 10,000	Other
	LCCDTS metallugical committee expertise-on going	\$ 10,000	In-Kind
	Supply Chain Mapping research- 4 month	\$ 40,000	Rural Dividend
	Sub-total	\$ 175,390	
Travel and Meetings <i>Meals and project travel related expenses must be based on government per diem rates.</i> Provide the following information in the description of cost: • type of travel (air, car, etc.) • destination • number of nights • number of people	Europe-2ppl - research supply chain and Circular economy expertise-Partnerships (flights, 7 nights hotel, transportation, per diem, car rental)	\$ 12,000	Other
	Sudbury-2 ppl- research metallurgical cluster- Partnerships (flight, 5 nights hotel, per diem, car rental)	\$ 5,000	Other
	Vancouver- 1 ppl-meet with gov officials, global affairs and International Trade officials-partnerships-4x (flight, 2 nights hotel, per diem, car rental)	\$ 6,000	Rural Dividend
	Waterloo- 2 ppl-research expertise in advanced materials and by-product development-Partnerships (flight, 5 nights hotel, per diem, car rental)	\$ 5,000	Other
	CIM-2ppl-materials science and technology conference-(flight, 6 nights hotel, per diem)	\$ 9,500	Other
	BC Tech Summit - 2 ppl x (flight, 3 nights hotel,per diem)	\$ 4,000	Other
	Trade Mission to USA - 2ppl (flight, 3 nights, hotel, per diem)	\$ 7,000	Rural Dividend
	Sub-total	\$ 48,500	
Training Provide the following information in the description of cost: • name/type of course/training • duration of the course/training • number of participants cost is based on • description of related expenses that may be included (ex. room rental, materials & supplies, registration fees)	Digital Technologies Training Workshops-Shopbot CNC, 3D Design and Printing, Handyscan Scanner, Laser Cutter, (4 course fees, travel, lunch, coffee)	\$ 28,000	Rural Dividend
	National Industrial Symbiosis Program Workshop for a Circular Economy (fees to pay for 2 trainers 2 nights, flights, fees, per diem, car rental)	\$ 7,500	Rural Dividend
	Host a Industry 4.0 School and Industry Night in partnership with I4C, Selkirk College and UBC-O (food, material costs, equipment, travel, lunch, coffee)	\$ 4,000	Other
	Various stakeholder meetings for buy in and sustainability- 10x(travel, lunch, coffee)	\$ 2,500	Other
	Selkirk College-expertise and program support-on going	\$ 5,000	In-Kind
	Sub-total	\$ 47,000	
Marketing and Promotion Provide the following information in the description of cost: • type of marketing and/or promotion (online, brochures, etc.) • if hard copy, how many copies are made (may be an estimate) • if an event, include a description of any related expenses (room rental, refreshments, etc.)	Metal Tech Alley Conference (see attached breakdown)-spring 2020	\$ 93,000	Other
	Creation of 3x digital By-Product Story Maps-COOP Student	\$ 20,000	Rural Dividend
	MTA Webpage upgrades-interactive functions and intuitive applications	\$ 20,000	Rural Dividend
	social media campaigns, video creation, photo bank, billboard campaign, various print articles (from Oct 2018-Dec 2020)	\$ 48,150	Rural Dividend
	LCIC marketing expertise and platforms	\$ 14,000	In-Kind
	Sub-total	\$ 195,150	
Equipment, Capital and Supplies Provide the following information in the description cost: • description of the item(s) • quantity of item(s), if applicable • description of any wages associated with the item(s) (ex. set-up & installation).	2 workstations for 2 new positions (computers/keyboards/screens/software/desks)	\$ 10,000	Rural Dividend
	Research Equipment-pullers/chemicals/glasswear	\$ 40,000	Other
	i4C-use of facility equipment and expertise	\$ 5,000	In-Kind
	MIDAS facility -use equipment and expertise	\$ 12,500	In-Kind
	Fenix Advanced Materials-use of equipment and expertise	\$ 12,000	In-Kind
	Sub-total	\$ 79,500	
Infrastructure Related Costs			

Provide the following information in the description of cost: • breakdown of all activities (ex. plumbing, electrical work, etc.) • description of all materials required • description of all wages and/or contractor costs including duration worked & number of employees			
Sub-total		\$	-

Other Costs Any costs that do not fit under other categories (ex. space or room rentals).			
Sub-total		\$	-

Total Project Cost		\$	838,890
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3. Project Funding				
Section 3A: Rural Dividend Funding Request				
		Amount \$	% of Total Cost	
Rural Dividend Funding Request	Auto-Calculated from Section 2. Project Costs	\$ 500,000	59.6%	
Section 3B: Applicant Contribution (Required for Single Applicant & Partnerships)				
	Description (REQUIRED) List all source(s) for applicant contribution (ex. reserve funds, partner name, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Applicant Financial Contribution	LCIC/LCCDTS/CBT/City of Trail and Rossland/Villages of Fruitvale, Montrose, Warfield and RDKB Area A&B	Yes	\$ 85,000	10.1%
	Teck	Yes	\$ 50,000	6.0%
	Fenix	Yes	\$ 50,000	6.0%
	KAST	Yes	50000	6.0%
	I4C	Yes	\$ 20,000	2.4%
In-Kind Portion of Contribution	Auto-Calculated from Section 2. Project Costs	\$ 83,889	10.0%	
Sub-total		\$ 338,889	40.4%	
Section 3C: Project Funding (List the remaining source(s) of all contributions to demonstrate how the project will be funded)				
	Additional In-Kind Contributions The remaining amount of in-kind contributions that cannot be applied towards the applicant contribution	Amount \$	% of Total Cost	
In-Kind Contribution	Auto-Calculated from Section 2. Project Costs	\$ 1	0.0%	
Sub-total		\$ 1	0.0%	
	Description (REQUIRED) Provide the level of government, name of program, etc. (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Government Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
Sub-total		\$ -	0.0%	
	Description (REQUIRED) List the source(s) of remaining other funds (ex. bank loan, industry, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
Sub-total		\$ -	0.0%	
Section 3D: Totals				
Sub-total Funding (Sections 3B & 3C)		\$	338,890	
Total Project Funding		\$	838,890	

4. Summary of Project Costs and Project Funding			
Project Costs		Amount \$	% of Total Cost
Salary and Wages		\$ 293,350	35.0%
Consulting and Profesional Fees		\$ 175,390	20.9%
Travel and Meetings		\$ 48,500	5.8%
Training		\$ 47,000	5.6%
Marketing and Promotion		\$ 195,150	23.3%
Equipment, Capital, and Supplies		\$ 79,500	9.5%
Infrastructure		\$ -	0.0%
Other Costs		\$ -	0.0%
		\$ 838,890	100.0%
Project Funding		Amount \$	% of Total Cost
Rural Dividend Funding		\$ 500,000	59.6%
Applicant Contribution		\$ 338,889	40.4%
Additional In-Kind Contribution		\$ 1	0.0%
Other Government Funding		\$ -	0.0%
Other Funding		\$ -	0.0%
		\$ 838,890	100.0%

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

End of Form - press "Tab" key to return to the beginning

Instructions

1 Please fill in all fields marked with a red asterisk (*).

2 Use the "Tab" key to move from field to field in order, or the mouse to select any available (white-filled) field.

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Use the Delete key to remove information; use "Copy" (or Control-C) to copy information for pasting in another location.
Note: Mac users - do NOT use Numbers as the form will not function properly.

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Please attach completed Project Budget to your Application submission through the Rural Dividend website.

1. Project Information

Applicant Name (maximum 250 characters)

Lower Columbia Community Development Team Society (LCCDTS)

e.g. Timberlake Chamber of Commerce

Project Name (maximum 250 characters)

Metal Tech Alley 4.0 - Sustainability in Circular Economy

e.g., Timberlake Farmers' Market Stalls

Funding Stream (select from drop-down list):

Partnerships Project

Using the Program Guide definitions, select a funding stream from the list

Is this a Destination Trail Project?

☒es

2. Project Costs

Provide a detailed breakdown of costs related to project implementation. Totals will be auto-calculated and used in later calculations.

Category	Description of Cost (REQUIRED) (maximum 250 characters)	Costs	Funding
<div>Salary and Wages</div> <div>Provide the following information in the description of cost:</div> <div><div>• job title</div><div>• wage rate</div><div>• number of hours or months of employment</div><div>• if position is existing or is for a new hire</div></div>			

	Project Coordinator (\$60,000 per year)-30 hours per week for 91 weeks-New Hire	\$ 103,350	Rural Dividend
	By-Product Research Scientists (2x)-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)-New Hire	\$ 70,000	Rural Dividend
	Training Program Director - (\$25,000 per year)- \$24/hr for 15 hours a week for 104 weeks-New Hire	\$ 50,000	Other
	Marketing Coordinator - (\$25,000 per year)-\$24/hr at 15 hours per week for 104 weeks-New Hire	\$ 50,000	Rural Dividend
	Technology Services Coordinator- (\$10,000 per year) - \$24/hr for 8 hours per week for 104 weeks-New Hire	\$ 20,000	Other
	Sub-total	\$ 293,350	
Consulting and Professional Fees Provide the following information in the description of cost: • description of the service • name of the consultant / professional providing the service (if known) • length of the contract (may be an estimate)			

	Sustainability Funding Model Consultant-4 month	\$ 40,000	Rural Dividend
	Circular Economy Consultant- 5 month	\$ 50,000	Rural Dividend
	KAST-mentors, expertise, program support-ongoing	\$ 6,200	In-Kind
	Selkirk College-expertise and data research,program support-ongoing	\$ 4,600	In-Kind
	Tech-product development expertise-ongoing	\$ 9,590	In-Kind
	i4C-IIoT commercialization support-ongoing	\$ 5,000	In-Kind
	Lab testing and analysis from outside services-as needed	\$ 10,000	Other
	LCCDTS metallurgical committee expertise-on going	\$ 10,000	In-Kind
	Supply Chain Mapping research- 4 month	\$ 40,000	Rural Dividend
	Sub-total	\$ 175,390	
Travel and Meetings Meals and project travel related expenses must be based on government per diem rates. Provide the following information in the description of cost: • type of travel (air, car, etc.) • destination • number of nights • number of people			

	Europe-2ppl - research supply chain and Circular economy expertise-Partnerships (flights, 7 nights hotel, transportation, meals, etc.)	\$ 12,000	Other
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	Vancouver- 1 ppl-meet with gov officials, global affairs and International Trade officials-partnerships-4x (flight, 2 nights hotel, per diem, car rental)	\$ 6,000	Rural Dividend
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	CIM-2ppl-materials science and technology conference-(flight, 6 nights hotel, per diem)	\$ 9,500	Other
	BC Tech Summit - 2 ppl x (flight, 3 nights hotel,per diem)	\$ 4,000	Other
	Trade Mission to USA - 2ppl (flight, 3 nights, hotel, per diem)	\$ 7,000	Rural Dividend
	Sub-total	\$ 48,500	
Training Provide the following information in the description of cost: • name/type of course/training • duration of the course/training • number of participants cost is based on • description of related expenses that may be included (ex. room rental, materials & supplies, registration fees)			

(online, brochures, etc.) • if hard copy, how many copies are made (may be an estimate) • if an event, include a description of any related expenses (room rental, refreshments, etc.)			
	Sub-total	\$	195,150

Equipment, Capital and Supplies Provide the following information in the description cost: • description of the item(s) • quantity of item(s), if applicable • description of any wages associated with the item(s) (ex. set-up & installation).	2 workstations for 2 new positions (computers/keyboards/screens/software/desks)	\$	10,000	Rural Dividend
	Research Equipment-pullers/chemicals/glasswear	\$	40,000	Other
	i4C-use of facility equipment and expertise	\$	5,000	In-Kind
	MIDAS facility -use equipment and expertise	\$	12,500	In-Kind
	Fenix Advanced Materials-use of equipment and expertise	\$	12,000	In-Kind
Sub-total	\$	79,500		

Infrastructure Related Costs Provide the following information in the description of cost: • breakdown of all activities (ex. plumbing, electrical work, etc.) • description of all materials required • description of all wages and/or contractor costs including duration worked & number of employees			
Sub-total	\$	-	

Other Costs Any costs that do not fit under other categories (ex. space or room rentals).			
Sub-total	\$	-	

Total Project Cost		\$	838,890
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3. Project Funding				
Section 3A: Rural Dividend Funding Request				
		Amount \$	% of Total Cost	
Rural Dividend Funding Request	Auto-Calculated from Section 2. Project Costs	\$ 500,000	59.6%	
Section 3B: Applicant Contribution (Required for Single Applicant & Partnerships)				
	Description (REQUIRED) List all source(s) for applicant contribution (ex. reserve funds, partner name, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Applicant Financial Contribution	LCIC/LCCDTS/CBT/City of Trail and Rossland/Villages of Fruitvale, Montrose, Warfield and RDKB Area A&	Yes	\$ 85,000	10.1%
	Teck	Yes	\$ 50,000	6.0%
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In-Kind Portion of Contribution	Auto-Calculated from Section 2. Project Costs	\$ 83,889	10.0%	
	Sub-total	\$ 338,889	40.4%	
Section 3C: Project Funding (List the remaining source(s) of all contributions to demonstrate how the project will be funded)				
	Additional In-Kind Contributions The remaining amount of in-kind contributions that cannot be applied towards the applicant contribution	Amount \$	% of Total Cost	
In-Kind Contribution	Auto-Calculated from Section 2. Project Costs	\$ 1	0.0%	
	Sub-total	\$ 1	0.0%	
	Description (REQUIRED) Provide the level of government, name of program, etc. (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Government Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
	Description (REQUIRED) List the source(s) of remaining other funds (ex. bank loan, industry, development trust, etc.) (maximum 250 characters)	Verified (Y/N)	Amount \$	% of Total Cost
Other Funding				0.0%
				0.0%
				0.0%
				0.0%
				0.0%
	Sub-total	\$ -	0.0%	
Section 3D: Totals				

Sub-total Funding (Sections 3B & 3C)		\$	338,890
Total Project Funding		\$	838,890

4. Summary of Project Costs and Project Funding		
Project Costs	Amount \$	% of Total Cost
Salary and Wages	\$ 293,350	35.0%
Consulting and Profesional Fees	\$ 175,390	20.9%
Travel and Meetings	\$ 48,500	5.8%
Training	\$ 47,000	5.6%
Marketing and Promotion	\$ 195,150	23.3%
Equipment, Capital, and Supplies	\$ 79,500	9.5%
Infrastructure	\$ -	0.0%
Other Costs	\$ -	0.0%
	\$ 838,890	100.0%
Project Funding	Amount \$	% of Total Cost
Rural Dividend Funding	\$ 500,000	59.6%
Applicant Contribution	\$ 338,889	40.4%
Additional In-Kind Contribution	\$ 1	0.0%
Other Government Funding	\$ -	0.0%
Other Funding	\$ -	0.0%
	\$ 838,890	100.0%

Please attach completed Project Budget to your Application submission through the Rural Dividend website.

End of Form - press "Tab" key to return to the beginning



Request for support

Reference #: 2018070131

Submitted: Jul 31, 2018

Status: Pending

Contact information

Organization	Lower Columbia Community Development Team Society (LCCDTS)	Primary contact	Terry Van Horn
		Title	Executive Director
Address	1355 Pine Ave Trail, BC, CA V1R 4E7	Phone	250-364-6461
		Mobile	s.22
B/N	S-0056029	Email	tvanhorn@metaltechalley.com
		Signatory Authority	Bill Van Beek
		Title	President
		Phone	250-364-6461
		Mobile	s.22
		Email	bvanbeek@shaw.ca

Organizational profile

Type of organization	Not-for-profit Organization			
Project partners associated	Partner name	Contact name	Phone	Email address
	Fenix Advanced Materials	Don Freschi	250-512-9378	don@fenixam.com
	Teck Metals	Thompson Hickey	250-364-4515	thompson.hickey@teck.com
	KAST	Don Freschi	250-362-5052	info@kast.com
	i4C Innovation Centre	Pilar Portela	s.22	pilar.portela@i4c.tech
	Selkirk College	Terri McDonald	250-365-1434	tmacdonald@selkirk.ca
Destination trails project	No			

Request details

Request type	Partnerships Project (up to \$500,000)
Kind of support	Financial support
Total amount requested	C\$500,000
Total project budget	C\$838,890

Project details

Name of project	MetalTechAlley 4.0-Sustainability and the Circular Economy
Location impacted	Canada - Kootenay - Kootenay Boundary - 1355 Pine Ave.-LCCDTS office
Focus of initiative	Business sector development
Description	<p>With the private and public sectors working together "MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a regional project that will further drive innovation in the advanced materials and technology sectors through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies, IIoT & Big Data and Industrial recycling. This project will also support the creation of a sustainability funding model to ensure continued success for the metaltechalley initiative and will include strategies for continued buy-in from our municipal and business leaders.</p> <p>Activities include:</p> <p>Supply Chain Inventory and Gap Analysis:</p> <ul style="list-style-type: none"> • Hire a consultant to inventory our supply chain and by products, identify local opportunities and recommend strategies to improve competitiveness. • Work with partners to research, innovate and create new opportunities to commercialize identified by-products. <p>Building a Circular Economy:</p> <ul style="list-style-type: none"> • Host a circular economy workshop to promote the benefits of building a circular economy and what their role is in ensuring success. • Travel and relationship build with regions who have successfully created a circular economy to understand and learn best practices. • Hire a part time Training Program Director to create, manage and deliver training programs. • Support two research by-product scientists. • Host Jobs of Tomorrow career awareness event • Host an Industry 4.0 School & Industry Night • Attend conferences and regions to market by-product development opportunities and attract researchers and entrepreneurs to further develop by products and create new markets. <p>Marketing and Promotion:</p> <ul style="list-style-type: none"> • Hire a part time Marketing coordinator who will continue to build relationships with Municipal, Provincial and Federal trade officials to further expand our outreach and continue to generate excitement and interest in the region. Promote metaltechalley through various platforms. • Attend targeted conferences and events with speaking engagement opportunities to address larger audiences and continue to broaden our outreach and share the metaltechalley story. • Host a MetalTechAlley Conference. <p>Sustainability of MetalTechAlley:</p> <ul style="list-style-type: none"> • Hire a consultant to review other cluster approaches and recommend solutions that will ensure metaltechalley continues to grow and expand the economy.
Beneficiaries	<p>Trail-7709</p> <p>Rossland-3729</p> <p>Fruitvale-1920</p> <p>Montrose-996</p> <p>Warfield-1680</p> <p>RDKB Area A-1891</p> <p>RDKB Area B-1442</p>

Outcomes & Indicators #1

Outcome Creation of a Sustainability Funding Model that will create a value proposition for the local businesses and elected officials.

Indicators of success \$100,000 of local funding is collected to advance the metaltechalley strategy.

Outcomes & Indicators #2

Outcome Digitally technology trained local youth and engagement and excitement about the career opportunities in digital technologies.

Indicators of success 800 youth participating in workshops and/or training and 5 local youth are hired by local companies.

Outcomes & Indicators #3

Outcome By-products are researched and commercialized.

Indicators of success 2 new companies created from the research and commercialization efforts.

Outcomes & Indicators #4

Outcome Increased interest of the region's opportunities through robust marketing strategies and hosting MTA conference.

Indicators of success 5 new companies attracted to the region and 15 new skilled workforce are attracted to the region.

Outcomes & Indicators #5

Outcome Supply chain inventoried and gaps analyzed.

Indicators of success 3 new business connections are made resulting in reduction of local businesses expenses. 1 new market is found for a local company.

Outcomes & Indicators #6

Outcome Creation of Circular Economy Strategy

Indicators of success 75% buy in from the local businesses.

Outcomes & Indicators #7

Outcome Training programs created for local workforce.

Indicators of success 10 companies participate in the training to diversify or increase skills of employees resulting in productivity increase.

Community Need Addressed This REGIONAL project supports the communities of Rossland, Warfield, Trail, Montrose, Fruitvale and RDKB Areas A&B which are heavily dependent on a single sector employer, Teck Metals, who employs either directly or indirectly over 35% of our local workforce. The LCIC has undertaken significant work in the past 5 years, through Business Retention and Expansion (BRE) efforts, a Foreign Direct Investment Strategy (FDI), and the creation of a the new MetalTechAlley marketing strategy, to find solutions to alleviate the constant cyclical nature of a resourced based economy. Recognizing diversification is essential for continued economic growth for communities in a single sector market the MetalTechAlley 4.0 – Sustainability in a Circular Economy project will continue to drive sustainable economic development in the metals and technology sectors. By continuing to strengthen and expand our expertise in advanced materials and emerging technological expertise this project will strengthen and diversify the local economy and will facilitate the generation of new jobs and new opportunities for workers and their families. It will provide access to new and expanding markets and resources and ensure the region's ability to compete in these new markets. Our residents benefit when our economy is healthy, strong and diverse, building confidence in our businesses, our residents and potential investors considering investing in our community. Building on the success of the previous metaltechalley initiative more work is needed to

ensure:

- continued outreach to the markets that best fit within our cluster.
- the best utilization of our products and services.
- continued exploration and innovation for our by-products.
- our local workforce has the training and skills to lead innovation.
- youth are trained on digital technologies to ensure they are obtaining practical skills to prepare them for employment in a digital world and match the needs of the local workforce.
- sustainability of the metaltechalley program.

Community Strength Increased

This REGIONAL project includes strategies that focus on global competitiveness, sustainability and competitiveness by positioning the region as a leader in the circular economy and focuses on enabling our businesses and their value chains to transition towards a more viable, sustainable and competitive economic model through market research and competitive analysis, continued engagement, education and training. The goal is for our supplies, services and opportunities to be top of mind for target sector companies looking to expand, skilled labor looking for a career, entrepreneurs looking for opportunities and trade officials to promote our region as a global leader in the metals and technology sector. Gaining exposure for the region and these sectors will build global business-to-business connections resulting in transfer of technology, opportunities, referrals, stronger partnerships and/or requests for services, ultimately improving regional unemployment statistics, contributing to corporate tax revenues and attracting investors. It will promote our openness for new business development, which in turn will build a diverse economy and leave residents with a sense of pride in their community and confidence in the local economy, ultimately ensuring workforce retention. Based on past engagement results the majority of the local business cited lack of skilled workforce as their biggest barrier to expansion and growth. Support of this program will allow us to go out on a wider scale to market our opportunities to attract the skilled workforce needed to ensure our businesses continue to grow and expand as well as locally develop educational and training programs with Selkirk College and MIDAS that align with our businesses needs, ensuring our local businesses stay healthy and have the ability to access new markets and increase their competitiveness. Supply of raw materials is limited and can be costly but if we can move towards a more circular economy by having an inventoried list of our supply chain, products, and services and with by-product development we can remove pressure on environment, improve the security of the supply of raw materials, increase competitiveness, stimulate innovation and we will boost economic growth and create more jobs locally. Creating a sustainability plan for the metaltechalley strategy that works for our businesses and our economy we will ensure this cluster approach continues to thrive long after funding from RDF.

Project supports innovation

Innovation is not just about creating new ideas; it is about finishing things we start, having the patience and commitment to help innovations go to scale, not just seeding the development of new things. This proposal takes the learnings and momentum we have underway with the MetalTechAlley initiative and move it towards the next steps in driving innovation in our region through understanding, inventorying and mapping our supply chain, identifying the gaps and researching viable business solutions while continuing to globally position the region as a centre of excellence in metallurgy and advanced materials, digital technologies and IIoT & Big Data and Industrial recycling. Strengthening regional business to business connections and collaboration, showcasing the breadth and depth of our business capabilities and our regions' collaborative efforts to regional and external markets will ensure continued growth and sustainability.

Project creates shared

Since the inception of metaltechalley we have attracted many diverse companies and

prosperity	<p>skilled workforce from foreign countries and have created an on-boarding program to support these entrepreneurs, businesses and employees from all walks of life, making the settlement process smooth and swift. With this support we will to continue to build our resources to ensure this process continues to support all our residents. This approach ensures diversification in gender and ethnicity, educational backgrounds, experience and family statuses enhancing economic growth both at the business and community levels. The project ensures access to all community assets and will ensure shared prosperity by focusing on advancing knowledge of existing work force, promoting investment from local and external businesses and attracting talent from all community areas, from youth to First Nations. By promoting social mobility through education and focusing on training the existing workforce, we are well positioned to decrease economic inequality in our region. Respecting rights and doing good business is as applicable to First Nations as it is to non-First Nations communities. We pride ourselves in the inclusive and regional approach we have taken locally, regionally and externally, with NGOs and the private sector in engaging all our residents to be inclusive. LCIC and LCCDTS are not only open to creating business partnerships and opportunities with First Nations and our communities that are mutually beneficial, it will also encourage innovation through early engagement and a willingness to adapt program offerings that will result in inclusive participation throughout the region, the province and the country. You will notice that as part of the LCIC 's work plan, creating a culture of inclusiveness is one of our key priorities.</p>
Project creates jobs	Yes
Direct fulltime jobs	3
Direct part-time jobs	3
Direct temporary jobs	
Project create employment	<p>Project Coordinator-full time-30 hours a week from Jan 1, 2019-Sept 30, 2020-will run, monitor administer and organise all project activities in cooperation with and under the direction of the LCIC EDO, aiming at the effective execution of the project. This is a temporary permanent position .</p> <p>Researchers-2x-full time-30 hours a week for 104 weeks (to be topped off with MITACS and IRAP)- will work with partners to create viable, value add products from by products and create business cases for commercialization.</p> <p>Marketing coordinator-part time-15 hours per week for 104 weeks-create and administer marketing and promotion campaigns through various platforms including social media campaigns, video campaigns, billboard campaign, various print articles and targeted email in-box outreach.</p> <p>Training Program Director-part time-15 hours a week for 104 weeks-to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.</p> <p>Technology Services Coordinator-part time- 8 hours per week for 104 weeks- work with our partners KAST, i4C and MIDAS to support and commercialize new business development to reach new and expanding markets and resources, support the settlement of new arrivals to the region and create strong relationships among service providers.</p>
Economic opportunities for youth	<p>Yes - The ability to retain youth depends greatly on offering jobs that are enticing, sustainable and offer growth opportunities. Quality jobs are at the heart of the resiliency and strength in the community. Transitioning young people from schools and training institutions into the labour market to become a skilled workforce will be achieved by building solid bridges between the world of work and the training programs that this project</p>

is focused on.

By hiring a part time Training Program Director to create and manage the training programs at MIDAS who will train local workforce and youth on advance manufacturing techniques and adapting digital technologies to improve processes and efficiencies and strengthen their ability to adapt to changing market demands through various workshops, seminars and mentorship to ensure skills meet the needs of the business community and ensure continued innovation.

We will also host an Industry 4.0 School and Industry Night in partnership with UBC-O, Selkirk College and I4C Innovation Centre to foster relationships between the business community and the youth to have a better understanding of the needs of the business community.

Host Jobs of Tomorrow career awareness event for K-12 students at Selkirk college and MIDAS Lab

to generate excitement of digital technologies and the potential for job diversity.

**Potential indirect employment
created**

It is well documented that the variation in indirect job creation multipliers reflect sectoral and regional variations, labor intensity of operations and local labor regulations. Where the metallurgical industry in general has a 6X multiplier, technology is 25X +. Based on regional variations, labor intensity and regulations, we envision a 10X multiplier.

MetalTechAlley 4.0-Sustainability and the Circular Economy includes programs that facilitate job creation through engagement of investor members with private sector clients by targeting investor companies to move, partially or completely, to the region to take advantage of the opportunities bringing at a minimum 1 person per company and more likely a small core team or 3 to 5. Expecting 5 new companies with a minimum of 3 employees over two years we anticipate 150 new jobs in the region. Implementing the next wave of productivity in the metal and IIoT sectors will require these companies to, in turn, expand and hire local staff and use local services again expanding local companies.

**Current community development
plan**

Yes - LCCDTS Strategies:

STRATEGY 2

Increase workforce growth, development and renewal by generating rewarding employment opportunities, by attracting and retaining talent, and by providing accessible education and skill development.

STRATEGY 3

Enhance business growth and development through innovative, regional investment strategies, and by leveraging and showcasing our unique natural and environmental assets.

LCIC Priorities:

Priority 1: Business Development and Investment Attraction

Strategies:

- Leverage Strategic Partnerships
- Promote Assets and Advantages
- Increase Awareness of Region
- Facilitate and Support Local Business needs

Priority 2: Growing and Marketing the MetalTechAlley Platform

Strategies:

- Develop a Circular Economy Mapping strategy to identify gaps and opportunities.
- Target new business or expansion opportunities with existing businesses (raw material by-products and industrial recycling).
- Grow and promote our industrial supply chain.
- Investigate renewable energy project opportunities around blockchain and Industry 4.0

technologies.

Priority 3: Organizational Priorities & Structure Development

Strategies:

- Investigate new funding partners and programs
- Explore sustainability "pay to play" approach

Priority 4: Advancing Progress-Leadership and Culture

Strategies:

- Continued engagement with local leaders
- Establish a welcome and onboarding team
- Establish a campaign to create a culture of openness and inclusion
- Create and promote a culture of technology adoption and pioneering new technologies

Existing community support

Support for moving metaltechalley forward to sustain and diversify our economy has been demonstrated from our regional service providers and the private sector with the increase of financial and in-kind support from most of the partners in this application validating what we are doing is working and our partners see value in the strategy.

By creating a strategically targeted marketing plan that leverages local organizations and enterprises in the metals and technology sectors we have created partnerships with other non metals related organizations to create a similar strategy for their specific needs. Since the creation of the metaltechalley strategy our core funding has been secured for 3 more years and is a direct result of the metaltechalley success.

As well as endorsement and support letters from the Cities of Trail and Rossland, and our local Community Futures Office, contributions from the following organizations and private sector companies range from cash to in-kind support:

KAST (Kootenay Association for Science and Technology), with their team of EiRs (Entrepreneurs in Residence) and local technological experts who provide mentoring services for business growth and stability as well as the MIDAS facility which will continue to provide access to equipment and startups and access to training programs.

Selkirk College will provide ongoing research and analysis related to the project to help build capacity for informed decision making.

Teck Trail Operations: metals industry leader who will provide expert knowledge and cash to support workforce attraction efforts and access to by-products for research and development expertise.

Fenix Advanced Material: will provide cash as well as in-kind support to access equipment, mentoring and expertise in metals.

i4C: will provide cash and in-kind support for entrepreneurs providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting products to market.

Contribution from other	C\$338,889
In-kind contribution from others	C\$83,889
Other organizations providing fund	No
Project start date	Oct 01, 2018
Project end date	Oct 31, 2020
Project duration	24
Project ready to commence	Yes
Key milestones	Project Coordinator hired-Jan 2019 Training Program Director hired-Nov 2018

Marketing Coordinator Hired-Jan 2019
 Technology Services Coordinator hired- Nov 2018
 By product research started by Dec 31, 2018
 Sustainability Funding Model completed – Oct 31, 2020
 Supply chain Inventory and recommendation-Dec, 2019
 Circular Economy Plan-Oct 31, 2020
 180 Digital Technologies Training Workshops completed-Oct 31, 2020
 National Industrial Symbiosis Program Workshop for a Circular Economy-Dec 31, 2018
 Industry 4.0 School and Industry Night-Dec 31, 2019
 10 Stakeholder meetings for buy in and Sustainability-Oct 31, 2020
 MetalTechAlley Conference – Spring 2020
 Europe- research supply chain and Circular economy expertise- fall 2020
 Sudbury- research metallurgical cluster- Partnerships-Winter 2018
 Vancouver-meet with gov officials, global affairs and International Trade officials-
 partnerships 4x--Sept 30, 2020
 Waterloo- research expertise in advanced materials and by-product development-
 Partnerships -Summer 2020
 CIM-2ppl-materials science and technology conference-Winter 2019
 BC Tech Summit -Spring 2019
 Trade Mission to USA - 2ppl -Summer 2019

Creation of 3x digital By-Product Story Maps-Mar 2019
 MTA Webpage upgrades-interactive functions and intuitive applications-Dec 31, 2019
 social media campaigns, video creation, photo bank, billboard campaign, various print
 articles - Sept 30, 2020

Project ongoing Yes

Project continuation A large portion of this application focuses on exploring and learning best practices of a sustainable cluster program and will take these learnings and create a metaltechalley sustainability funding model that will include strategies for continued buy in tailored to our region's businesses, organization's and elected leaders to ensure continued success for the metaltechalley initiative.

As awareness of the metaltechalley initiative continues to expand, our neighboring communities are inquiring how to partner with us on the initiative; as we continue to move forward and get buy in from surrounding communities our capacity will increase and our outreach will continue to grow and expand resulting in economic prosperity for all our communities.

Project management skill There has been incredible interest of the metaltechalley project using a regional cluster approach to drive economic development in a rural community including; 9 Ministry and staff visiting the region, 3 Provincial projects partnerships and 5 speaking engagements in partnership with the Province to promote metaltechalley and the strategy. We have demonstrated and proven we are a results oriented regionally focused organization with support of the private sector and excellent partnerships locally, provincially, nationally and internationally. With the expertise of the LCCDTS/ LCIC staff and board, which consist of over 50 professionals in the region working collaboratively on economic development; these organizations are well situated to support and administer this project.

Terry Van Horn, the Economic Development Officer, lead for the project. Under her leadership the LCIC has been recognized as a leader in economic development activities throughout the Province and in the last four years has won two BCEDA provincial awards and one BCEDA honorable mention award (first time ever awarded) for various Marketing Initiatives that have been undertaken through the LCIC office with limited resources and funding. The LCIC Thriving Metrics dashboard is recognized as an Economic

Development best practice and is featured in the new Provincial Economic Development Metrics Toolkit.

The LCIC has implemented several successful similar projects including a Foreign Direct Investment Strategy which identified expanding the metals and technology sectors as areas of opportunities for the region to grow and diversify. In her seven years as EDO, Terry has leveraged her core funding with funding from private companies, Provincial agencies (RDF, SIDIT, LMP), Federal agencies (ICCI), Columbia Basin Trust, and various other organizations to over \$1.5M. Proving the LCIC is a trusted organization that gets things done collaboratively, on time, within budget and in a professional manner.

Role of project partner

"MetalTechAlley 4.0 - Sustainability in a Circular Economy" is a fundamental link between the resource based local industries and the Industry 4.0 gaps for the commercialization of related products that will be developed by existing community businesses, entrepreneurs and investor businesses interested in relocating to the region and uses project partnerships and resources to fill the gaps. At the centre of metaltechalley is LCIC and LCCDTS in partnership with our local communities regional district and Columbia Basin Trust who have provided the confidence and leadership in championing the project and have committed \$85,000 in cash to use a leverage and buy in.

To ensure our long term goals are met, we have partnered with private sector companies like Teck Metals, the world's largest integrated lead zinc smelter located in Trail BC; Fenix Advanced Materials a successful by-product purification company; who will provide access to expertise, research and testing facilities as well as by-products for further innovation and development; I4C Innovation Centre, the next step in business development, who will support these new entrepreneurs in providing access to equipment and research facilities as well as expertise in commercialization, acceleration and getting their products to market. We have also secured partnerships with MIDAS, a metallurgical industrial research and development centre that offers start ups a digital fab lab for rapid prototyping and assistance in business development, as well as access to expertise, equipment and research facilities; KAST for expertise in business development, brokering partnerships, skills attraction, mentoring, commercialization and referrals; Selkirk College and UBCO for brokering partnerships, access to funding streams, data collection, research, innovation, expertise and equipment in development of by products.

Project risks

Based on the previous RDF application, the LCCDTS/LCIC has proven to be a responsible funding recipient with fiscal accountability, reporting culpability with project successes that have exceeded expectations.

Moving towards a circular economy, as with any new way of doing business, may cause some apprehension and friction and be perceived as a threat by some stakeholders, but with good communication and informed decision making that and focusing on the greater benefits like environmental, social and economic impacts will ensure buy in from our residents, businesses, and communities. Finding the right person/s who want to research and be an entrepreneurs will require a very targeted approach. Expanding our reach and continued sharing of our story to a broader audience will continue to help stimulate interest and curiosity and drive growth and prosperity for all our communities. Access to relevant, up to date resources and services to support these new entrepreneurs and employees will be essential to project success ensuring all our partners are educated on the services and resources available will help share the load in ensuring the settlement process for new residents to the region are best supported. Understanding relationship building and brokering products and services take time and resources through this project funding we will continue to broaden our reach, educate our economic leaders and build strong relationships and implement processes that will ensure continued success of metaltechalley.

Creating a sustainability plan that works for all our partners will be a challenge but with continued engagement and education we will find a value proposition that ensures

financial stability for metaltechalley. To ensure goals and deliverables are met a robust monitoring process, as per the previous application, will be implemented and adjusted throughout the progress of the project.

Project include physical infrastructure	No
Destination trails permits/jurisdiction	N/A
Resolution	Motion: To support an application to the BC Rural Dividend Fund for “Metal Tech Alley 4.0 – Sustainability in a Circular Economy “.
Resolution moved by	Don Nutini
Resolution seconded by	Audry Durham
Resolution date	Jul 19, 2018

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PART I: INTRODUCTION



1. What is an OCP?

The Official Community Plan (OCP) is the City's vision for the future growth and development of the community and it reflects the ideas and input of the people who live and work in Rossland. The vision is communicated in words and maps through this Plan. However, it will be realized by the changes we see in our community as new development occurs, new residents settle here and new businesses are established. The Plan provides the City with a guide for development by establishing policies and designating land for specific uses. It also provides clear direction as to how the community will look over the next five years.

The purpose of the City of Rossland's Official Community Plan (OCP) is to provide Council with a means of guiding future growth and development in an orderly, consistent and efficient manner. The OCP provides a community vision for the residents and property owners of Rossland. It outlines the anticipated form and character of their neighbourhoods and more generally the entire City. Furthermore, the OCP informs residents, developers and investors with respect to what type of development is desired and illustrates the preferred locations.

It is important to note that the objectives and policies within the OCP serve to guide future growth. The OCP is designed to address the

'big picture' concerning the general direction and management of future growth. An OCP is a statutory document established by the *Local Government Act* that provides an overall vision for the community. The Official Community Plan is not meant to regulate the specifics of development, but rather provide an overall picture of the future for the community, and a tool for working towards community objectives. Municipalities have additional tools at their disposal to further regulate parcel specific development; for example, Zoning Bylaws and Subdivision Bylaws.

The following chart generally illustrates the relationship between the Strategic Sustainability Plan, the Official Community Plan and the zoning bylaw.



Structure of the Official Community Plan

The OCP is divided into the following parts:

Part I (Introduction): Describes the purpose and development of the Official Community Plan.

Part II (Visions to Action): Provides an overview of the Visions to Action Strategic Sustainability Plan and how this information informs and influences the OCP.

Part III (Community Context): Provides an overview of population, housing and the economy in Rossland and outlines potential growth that Rossland may see in the future.

Part IV (Community Land Use Designations): Describes the different land use designations used by the City.

Part V (Objectives and Policies): Organized by policy area, this section identifies the objectives and policies for guiding and directing development in Rossland in the years to come.

Part VI (Implementation, Monitoring and Review): Provides a description of how this OCP will be implemented, monitored, amended and reviewed over time.

Part VII (Development Permit Areas): Describes the objectives and guidelines for development in each of the four Development Permit Areas.

Part VIII (Schedules): Lists the map schedules and sub-area plan schedules that together with this current document (Schedule A), form the complete content of the OCP.



2. Scope and Content of the OCP

Legal Framework

This Plan has been prepared in accordance with the requirements of the *Local Government Act*, and upon adoption it will become a legal document. The *Local Government Act* enables municipalities to prepare Official Community Plans for the entire municipality or for certain areas of a municipality. This document comprises the Official Community Plan for the entire City of Rossland, providing municipality-wide development objectives and policies.

The legal framework and process for Council adoption of an OCP is established in the *Local Government Act*. As OCPs are municipal bylaws, they are legal documents. If Council wishes to allow development that contravenes the OCP, Council must first amend the Plan, recognizing public input.

What a Plan Can and Cannot Do

In accordance with the *Local Government Act*, an OCP is a general statement of the broad objectives and policies of the local government, respecting the form and character of existing and proposed land use and servicing requirements in the area covered by the Plan.



Photo: Troy Colautti

The *Local Government Act* also prescribes the content of OCPs. Matters which must be dealt with in an OCP include:

- The approximate location, amount, type and density of residential development required to meet anticipated housing needs over a period of at least 5 years;
- The approximate location, amount and type of present and proposed commercial, industrial, institutional, agricultural, recreational and public utility land uses;
- The approximate location and area of sand and gravel deposits that are suitable for future sand and gravel extraction;
- Restrictions on the use of land that is subject to hazardous conditions or that is environmentally sensitive to development;
- The approximate location and phasing of any major road, sewer and water systems;



- The approximate location and type of present and proposed public facilities, including schools, parks, and waste treatment and disposal sites; and,
- Other matters that may, in respect of any plan, be required or authorized by the Minister responsible.

In addition, an OCP must include policies respecting affordable housing, rental housing and special needs housing.

The Plan reflects community values which have been articulated by Council and the general public. The OCP can achieve consensus; yet for some issues, the OCP represents a compromise between opposing viewpoints.



PART II: VISIONS TO ACTION

STRATEGIC SUSTAINABILITY PLAN



3. Summary

The world is coming to Rossland. Visitors have discovered Rossland as a great place for recreation and as a consequence, a different scale and form of development is taking place. This development has the potential to expand and change our community. Coincidentally, global economic and environmental forces are also affecting us. We are no longer a remote, isolated community; the status quo is no longer a viable option. Our future will depend on our resilience and our capacity for constructive change.

Meeting our needs today without compromising the ability of future generations to meet their needs and enjoy a similar quality of life to what we enjoy today; that is the heart of our commitment to sustainability, our primary challenge and the driving force behind the creation of the Strategic Sustainability Plan (SSP). All three aspects of the sustainability triad: environment, economy and social values have been considered, not as isolated priorities but as interconnected imperatives. All must be addressed if we are to avoid compromising that future.

The SSP is a product of community effort. The consultants provided their expertise, skills, and the knowledge and experience from other communities who have chosen this path. A Steering Committee of community volunteers has guided the process to ensure the community viewpoint is well represented

throughout the process. City staff and the City's contract manager have managed the process to ensure the events went smoothly and according to plan and budget. But above all, the primary input to the process has been that of community residents. Effective engagement of the community was a key commitment from the outset. Through several months of meetings, workshops, task groups, scenarios, surveys, website and newsletters, the Visions to Action ideas, discussions, conflicts and conclusions have been passionately expressed.

The Strategic Sustainability Plan expresses Rossland's commitment to a sustainable future. It provides the long-term Community Vision, Principles, End-state Goals, Strategic Directions and Strategic Actions to guide that journey. It is an overarching 'umbrella document' that helps to direct other plans such as the Official Community Plan and Master Plans. The Strategic Sustainability Plan represents a process for moving to action, rather than a fixed course. It is a framework within which innovation, enterprise and ideas will be encouraged as the community learns and adapts to the opportunities and challenges that lie ahead. It provides direction for the actions over which the City has jurisdictional control, and helps to facilitate partnerships to address issues of wider interest.



4. Guiding Principles

The following guiding principles represent the key themes and values that have emerged from community consultation. These form the basis of ‘who we are’ and ‘what we believe in’ as a community. These principles will be used to enhance the quality of decision-making, prioritize actions, and evaluate programs and policy decisions.

Principle 1 - A Sustainable Community

Rossland is committed to meeting its existing needs without compromising the ability of future generations to meet their own needs. The City considers the long-term impacts of policy decisions and programs and ensures that decision-making processes reflect the local objectives for sustainability.

Principle 2 - Stewards of the Environment

Rosslanders are stewards of their mountain environment and work to preserve, restore, and manage the ecological health of their environment for present and future generations. The City’s policies and decision-making processes are guided by a desire to maximize environmental benefits while minimizing and mitigating negative environmental impacts.

Principle 3 - A Resilient Economy

Rossland’s approach to economic development is guided by a desire to support local business, foster prosperity and develop an economy and labour force that is sufficiently diverse. Such an economy could withstand economic cycles and capitalize on emerging economic opportunities.

Principle 4 - Conservation of Natural Resources

Rossland is committed to growth and economic development that protect the natural environment and promote efficient and equitable use of land, energy, water, and material resources. Rosslanders recognize that a healthy environment is integral to the City’s long-term economic and social interests.

Principle 5 - A Cohesive and Liveable Community

Rossland strives to build and maintain a vibrant, safe, and healthy community with a strong social fabric. The City works to ensure that its residents have access to quality education, affordable housing and basic public services. City policies and planning processes recognize that the quality of social and economic development takes precedence over quantity.



Principle 6 - Small is Beautiful

Rosslanders value their small community and its historic character. Development, land use and transportation policies serve to maintain the small town feel of Rossland and ensure that the historic townsite is maintained as the commercial, cultural, and social focal point of the community.

Principle 7 - A Culture of Leisure and Recreation

Rosslanders are united in their culture of recreation. City policies and programs encourage the facilitation of year-round indoor and outdoor recreation and keep residents healthy, active and engaged in arts and culture.

Principle 8 - Innovative Leadership

Rossland provides leadership in many aspects of sustainable resort planning and community development. In addition to adopting best practices, the City sets an example by developing model programs and innovative approaches to reaching its goals and by sharing its lessons with others.

Principle 9 - Partnerships for the Common Good

Rossland plays an active part in a larger community of shared interests. The City works to build partnerships among businesses, residents and community stakeholders to achieve its shared Community Vision, and with neighbouring communities, regional, provincial and federal governments to meet shared objectives.

Principle 10 - Participatory Democracy

Rossland recognizes that its citizens are its greatest resource, and that truly effective governance depends upon harnessing the collective expertise, knowledge and creativity of the residents. The City provides citizens with frequent and convenient opportunities for meaningful engagement and input into its decision-making processes.



5. Community Vision

Rossland's overall Vision for the future, as defined in the Visions to Action Strategic Sustainability Plan is:

In 2030, Rossland is a resilient alpine community and a leader in balancing social, environmental and economic sustainability. Celebrated for its unique cultural heritage, small-town charm and world-class natural amenities, Rossland offers residents and visitors alike extensive recreational opportunities, trail networks and green spaces. The thriving, diverse economy embraces innovation and entrepreneurship, and its citizens actively contribute to a welcoming, vibrant community that is safe, inclusive and affordable.

In addition to the overall Vision for the future of Rossland, the Strategic Sustainability Plan developed statements describing the Desired Future for each of the eleven defined Focus Areas. The following table links the Desired Future statements to OCP policy sections that work towards realizing these statements.

Focus Area	Desired Future	Related Policy Section
Land Management	<i>The town is centred on a compact and vibrant downtown core, connected by trails and green corridors to development at the base of Red Mountain, Redstone Alpine Golf Resort and to new developments. A diverse range of residential and tourist accommodation exists that satisfy the needs of residents and visitors. Buildings and infrastructure are designed and restored in ways that use resources responsibly, and that compliment the natural environment, heritage and overall aesthetic of the town. The downtown core is thriving and the restored heritage character attracts visitors to Rossland.</i>	12, 15, 18, 19, 20, 21
Natural Environment and Resource Lands	<i>Rossland's spectacular setting in the alpine environment gives the community its unique character. Designated and protected green spaces, green corridors, riparian areas and natural ecosystems allow indigenous flora and fauna to thrive. The built environment is also integrated into the natural environment through native tree plantings and 'fibbons' of green traversing the City and along stream corridors. In addition, community gardens have been established, providing potential sites for growing local produce.</i>	14, 15, 26
Community Economic Development	<i>Rossland's traditional natural resource economy has become increasingly value-added and exists alongside a year-round tourism and knowledge-based sector. Through collaborative actions across the wider region, residents have the capacity to find or create work opportunities and incomes to support sustainable lifestyles. The community works together to support local businesses and to encourage innovation, new businesses, and an entrepreneurial spirit. A diverse, resilient, and vibrant economic base is supported by state-of-the art information and communication technology (ICT) systems. ICT enables a significant number of residents to work from home or to expand their business through virtual networks. Sustainable business practices ensure the continued liveability of the region and contribute to the long-term survival and profitability of the business sector.</i>	25



Recreation and Leisure	<i>The town promotes and supports a healthy and active population and this is reinforced by a community that embraces a balance between work and play. Rossland is a unique destination for year-round outdoor alpine recreation. Residents and visitors of all ages and abilities engage in high quality, diverse recreational opportunities while respecting and protecting the surrounding natural environment. The conservation and sustainable use of green spaces and development and maintenance of an extensive network of multi-use trails connects both people and the community with nature. Accessible, well-maintained playing fields and indoor recreation facilities complement the range of outdoor experiences. The community hosts a number of arts and culture events.</i>	15, 16
Housing and Affordability	<i>Rossland has a sufficient supply of safe, healthy, diverse and affordable housing and accommodation to meet the needs of permanent residents of all income levels. Housing affordability is enhanced through efficient use of energy and resources and by designing buildings that can be adapted over time to accommodate different uses, changes in technology, and demographics. Employment opportunities close to home provide job satisfaction and adequate incomes for sustainable livelihoods. Residents have access to affordable food products, learning opportunities, and arts, culture, and recreation programs.</i>	18, 16, 25
Transportation	<i>Rossland's transportation system offers affordable, reliable, safe, accessible, frequent, green, and efficient means of moving within Rossland and to and from Rossland. The community's liveability is enhanced by an extensive local and regional trail network that supports non-motorized vehicles. Land use planning connects housing with services through trails and transit, thereby reducing automobile dependency. Rossland's downtown core is accessible, pedestrian-friendly and linked to the resorts by a high quality public, equitably funded transit connection. The community encourages and supports low-impact environmentally-friendly transportation choices, thereby conserving the natural environment and increasing Rossland's tourism appeal.</i>	15, 22
Intergenerational Care and Learning	<i>Rossland's affordable and multi-faceted educational system provides a diversity of programs and opportunities and an essential foundation for cultural and social activities. Local educational facilities continue to provide access to affordable, high quality K-12 education and the development of basic life skills. Residents and local organizations work together to provide support and care for children, seniors and other populations with special needs. Community activities and programs encourage intergenerational interaction and enhance well-being, while Rossland's built environment and institutional structures encourage lifelong learning for every member of society.</i>	16
Sense of Community	<i>Rossland is a safe, inclusive and welcoming community with a high level of social cohesion amongst a diversity of ages, cultures and lifestyles. The level of volunteerism is high and most year-round residents are engaged in governance and community development initiatives. Arts and cultural expression thrive in Rossland and are supported by both residents and visitors. Rossland's natural environment and its heritage create a sense of place and an authentic small town charm that is unique to the region. It is this uniqueness that fosters pride and community spirit, that serves to retain residents and to attract new residents and visitors.</i>	16



Energy and Air Quality	<i>Rossland is a leader among small mountain communities in the generation and use of clean, renewable energy that fulfills a major portion of the community's energy needs. Rossland's diverse energy systems make the town energy self-sufficient and reduce harmful impacts on air, land, water, and the climate. The town conserves energy through an increasingly energy and resource efficient building stock, and residents generally get around by walking, cycling, and using public transit. The town maintains its carbon neutral status with the cooperation of residents and businesses who work to conserve energy in their daily lives and operations.</i>	14, 26
Water and Solid Waste Management	<i>The water resources in Rossland provide a dependable supply of clean, healthy water that exceeds quality requirements and meets the needs of residents, and visitors. Residents are active water custodians. Both the water and wastewater systems are sustainably managed to meet the needs of a growing community. Competing uses are balanced and natural hydrological systems as closely mimicked to meet natural ecosystem needs. Rossland is a leader in minimizing waste and maximizing recycling and reuse of resources and materials. Residents and businesses conserve resources in their daily activities.</i>	23, 26
Governance	<i>Governance in Rossland is democratic, responsive, accountable and transparent and actively engages stakeholders and residents in collaborative decision-making processes. Planning and decision-making align with the community's values and sustainability objectives. Rossland participates in local and regional government networks that exchange knowledge and resources and collaborate to meet shared objectives through efficient regional governance.</i>	24



6. From SSP to OCP

Rossland conducted an extensive public engagement process that culminated in the drafting and eventual adoption (by Council) of the Strategic Sustainability Plan. The development and revision of the City of Rossland OCP is a continuation and extension of the SSP. The final public consultation exercise for the SSP involved the Community Design Charrette, which offered an opportunity for a group of design professionals, specialists and community members to spatially explore the community Vision for the future. This exercise evolved into the OCP development and review.

The Strategic Sustainability Plan provides a framework to guide the revision and/or development of policy contained within the existing OCP (1995). To bring the new bylaw into alignment with the SSP, the policies contained within the existing City of Rossland OCP were reviewed within the context of the SSP. Where required the existing policies were revised, and new policy was developed where none existed. The OCP alignment included addressing the stated End Goals contained within the SSP. Guiding Principle 10 states:

The City provides citizens with frequent and convenient opportunities for meaningful engagement and input into its decision-making processes.



To achieve this goal the OCP must be an easy to reference policy document that also provides a vision for the future growth and development of the community. It was with this intention that the revision and reformat of the OCP was completed. In order to enhance the understanding of the OCP for a wide spectrum of Rossland residents, the overall number of land uses was reduced by 60% (from 27 land uses to 11) and the schedules are presented in a logical manner that facilitates easy reference.

The individual land uses have been developed to facilitate flexibility and encourage creativity from the development community while continuing to provide land use guidance for staff and residents.

The final steps in adopting the Official Community Plan included an Open House held in May 2008 followed by several Council meetings to discuss public feedback. Referrals were sent to various federal and provincial agencies. The first public hearing was held on October 8, 2008 followed by another public hearing on October 21, 2008.



PART III: COMMUNITY CONTEXT



7. Geographical Setting

Rossland's central core of development lies in a rolling north/south pocket of land that is bounded in all directions by ridges of varying steepness. The majority of Rossland's development occurs on land having slopes of between one and ten percent, with substantial amounts of development occurring on slopes between 10% and 30%. The Red Mountain base area is relatively unencumbered by topographic constraints. Rossland's highest point is just over 1,400m and the lowest point is approximately 750m. Rossland has a land area of 57.97¹ square kilometres and approximately 34² kilometres of paved roads.



Photo: David Dudeck



¹ Source: Statistics Canada, 2006 Census of Population

² Source: Municipal Statistics, 2005



8. Historical Context

Rossland's beginnings are linked to the discovery and mining of rich gold deposits in the surrounding mountains. The first claim was staked in 1890 and the next few years saw an influx of prospectors, miners and people with financial interests in developing underground mining operations. Rossland became a boom town in early 1895 when the richness of the gold deposits had been established and financing for mining development was in place. At this time, two different railway companies built lines into Rossland to transport the ore and goods needed by the mining industry and its workers, and a smelter was in development in Trail. Hotels, boarding houses and businesses of all sorts, sprung up in the Rossland townsite. Rossland was incorporated as a City in March of 1897 and with a population of 7000 citizens it was British Columbia's fourth largest city.

The Rossland mines ceased operation on a large scale in 1929, marking the end of 35 years of extremely lucrative production. The creation of a Co-op for transportation by car, of workers to and from the Smelter allowed many people to continue living in Rossland. Despite the two big fires of 1927 and 1929, there remains a rich legacy of historic buildings and sites that originated in the mining days. Some are noted here:



Photo: Royal BC Museum

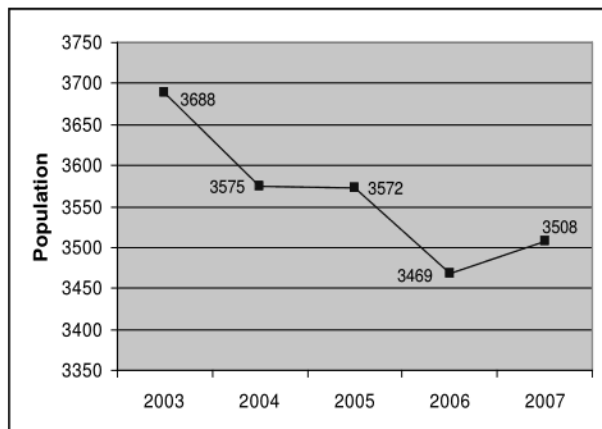
- Rossland Court House – Federal heritage site (1900);
- Old Fire Hall and City Hall (1900);
- Post Office (approx. 1900);
- Bank of Montreal (approx. 1900);
- Drill Hall (1904, now MacLean School Annex);
- Original WKP&L Co. Substation (1898);
- Miners' Union Hall – Provincial heritage site (1898);
- Orwell Hotel (approx. 1900, now Flying Steam Shovel);
- Stone Block (originally Bank of Toronto - approx. 1900);
- Church Manse (approx. 1900);
- Ross Thompson House (approx. 1900);
- WKP&L Co. Manager's House (approx 1900);
- WKP&L Co. Superintendents' House (approx 1900);
- J.S. Dechamp House (approx. 1910);
- Catholic Cemetery (1895);
- Columbia Cemetery (1900);
- LeRoi Mine Site on Red Mountain – Federal heritage site and home of the Rossland Museum.



9. Community Profile and Projections

Population

The City of Rossland has been experiencing a fluctuating permanent population due to a shift from being a primarily resource industry-based economy, to an increasing resort tourism economy. In 2007, the City of Rossland had a population of 3,508 people. The permanent population has decreased an average of -1.25% from 2003.³ The City of Rossland's population makes up approximately 10.6% of the Regional District of Kootenay Boundary's population of 33,042 people.



Population growth for the City of Rossland: 2003 - 2007 (BC Stats, 2008)

The average household size in Rossland is 2.4 persons, slightly lower than the provincial average of 2.5. Thirty-one percent of households are couples with children, 31% live as couples without children, 28% live alone,

³ BC STATS 2008



Photo: Troy Colautti

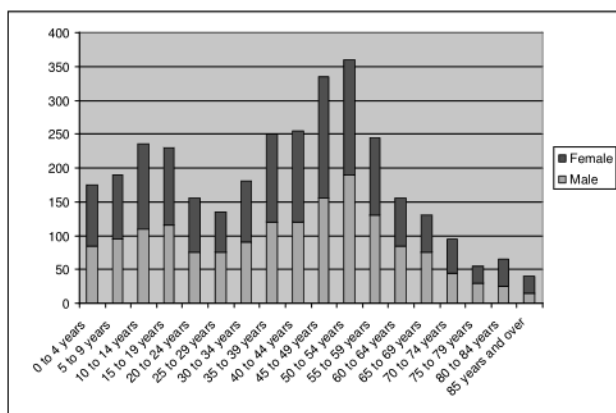
and the remaining ten percent live in other situations.⁴

The median age for residents in Rossland is 41.9 years, which is similar to the provincial median age of 40.8 years. The percentage of the population under the age of 19 is 25.6, higher than the provincial percentage of 23.2. The dominant age group is 35 to 54-year-olds, comprising just over 36% of the population. Persons over 65 years currently make up 12% of the population. The breakdown by gender is 50% men and 50% women in Rossland, compared to 49% men and 51% women province-wide.⁵

⁴ Statistics Canada. 2006. Census of Population

⁵ *Ibid.*





**Population breakdown by age and gender:
2006 Statistics Canada**

The following table illustrates potential population projections for Rossland over a 20 year period using information from BC Statistics 2008. The projections used are the Average Annual Growth Rate for Rossland, Regional District of Kootenay Boundary (RDKB), and British Columbia (BC).

Projected population from 2007 to 2028

Year	Rossland (-1.25%)	RDKB (-0.3%)	BC (1.2%)
2007	3508	3508	3508
2008	3464	3497	3550
2013	3253	3445	3768
2018	3055	3394	4000
2023	2868	3343	4246
2028	2694	3294	4507

Projected Population = $(1+g)^n \times P_1$ where:

g = average annual growth rate

n = time in years since initial population

P_1 = 2007 population

Since the previous OCP, market conditions and development opportunities have changed within the City of Rossland. The new developments at Redstone Golf Resort and Red Mountain Ski Resort are enticing

recreational enthusiasts to consider Rossland for full time and seasonal residence. As a result, growth is anticipated to occur within the Red Mountain and Redstone resort communities, which will include predominantly occasional or seasonal occupants, with some spill over into existing City neighbourhoods. This 'surge' is supported by the recent increase in building permit activity since 2005; however, this level of activity will not likely be sustained over the long term.

Population Considering Seasonal Residents and Second Home Ownership

The recent increase in building permit activity since 2005, coupled with a declining population as measured by BC Statistics, can be explained as representing growth in seasonal occupants and second home ownership. An average of 41 residential building permits per year has been issued since 2002, while the permanent population has dropped by 6.1%, according to BC Statistics.

Residential building permit activity

Year	Population*	No. of Building Permits
2002	3,736	14
2003	3,688	20
2004	3,575	44
2005	3,572	42
2006	3,469	83
2007	3,508	40

* reflects permanent residents only – source BC Statistics

In 2006 the average household size in Rossland was 2.4. The total number of private dwellings was 1656 with 1353 being occupied by usual residents. 'Usual place of residence' refers to a



dwelling in which a person lives most of the time.⁶

Initial drafts for this OCP considered the impact of non-permanent residential units by providing two predictions of growth within Rossland as shown below. The population predictions are based on two different methods:

1. The number of existing residential units occasionally occupied since 2001 using an average household size of 2.4 residents per unit (91.8% growth rate); and
2. The increase in building permit activity since 2001 using an average household size of 2.4 residents per units (2.2% growth rate).

Draft OCP population predictions

Year	Permanent Population Combined with Seasonal Population	
	1.8%	2.2%
2006	4,154	4,306
2007	4,229	4,401
2012	4,623	4,907
2017	5,055	5,471
2022	5,526	6,100
2027	6,042	6,775

Subsequent investigations provided by UMA Engineering for the Draft Development Cost Charge (DCC) Background Report, July 2008 compared these OCP growth predictions with historical growth (since 1996) in similar BC municipalities.

During this period:

- Rossland's permanent population declined by 11% (average -1.0%/yr);
- Castlegar's population grew by 7% (average 0.6%/yr);
- Kimberley's population declined by 4.9% (average -0.4%/yr);
- Kelowna's population grew by 25% (average 2.3%/yr);
- Invermere's population grew by 19% (average 1.7%/yr);
- Vernon's population grew by 16.7% (average 1.5%/yr);
- Whistler's population grew by 30% (average 2.7%/yr); and
- BC average population growth was 13% (average 1.2%/yr).

An average annual growth rate of 1.8% - 2.2%, over the long term, could be considered a strong real estate market, equivalent to the Cities of Kelowna and Invermere for the period 1996-2007 - both cities are favoured winter/summer resort destinations for BC and Alberta residents.

Taking into account the information referenced above, the OCP will use the growth rate suggested in the Draft DCC Background Report. This report anticipates that growth over the next 20 years will range from 1.0% to 1.5% annually, including seasonal occupancy. As a starting point, it can be assumed that the 303 private dwellings not occupied by usual

⁶ *Ibid.*



residents have an average household size of 2.4 also, resulting in a seasonal population of 728 for 2006. This would give a total population of permanent and seasonal residents of 4197.

The following table illustrates potential population projections for Rossland over a 20 year period using a revised Average Annual Growth Rate for Rossland. This growth rate is based on recent trends in building permit activity, tempered by medium term impacts in the US market as suggested in the Draft DCC Background report.

Population projections using Average Annual Growth Rate

Year	Permanent Population Combined with Seasonal Population	
	1.0%	1.5%
2006	4197	4197
2007	4239	4260
2012	4455	4589
2017	4682	4944
2022	4921	5326
2027	5172	5738

Projected Population = $(1+g)^n \times P1$ where:

g= average annual growth rate

n = time in years since initial population

P1 = 2006 population

Due to uncertainties inherent with projecting growth over 20 years, these growth assumptions should be monitored and adjusted over time.

Increasing the population in Rossland, particularly in a year-round resident population is a goal for the City of Rossland.

Housing

The following table illustrates the housing statistics for Rossland in comparison with Kimberley (a similar economy) and British Columbia averages.

Housing statistics for Rossland, Kimberley and B.C. - Statistics Canada 2006.

Dwelling Characteristic and Type	Rossland	Kimberley	B.C.
Private dwellings occupied by usual residents	82%	88%	92%
Average value of dwelling	\$242,668	\$192,930	\$418,703
Owned dwellings	86%	76%	70%
Rented dwellings	14%	24%	30%
Dwellings constructed before 1986	90%	86%	62%
Dwellings requiring major repair	14%	9.20%	7.4%
Single detached home	86%	81.6%	49.2%
Semi-detached houses	1.5%	3.5%	3.1%
Row houses	0.7%	3.9%	6.9%
Apartments, duplex	1.1%	0.0%	10.0%
Apartment building, 5 or less stories	9.2%	9.0%	20.9%
Apartment building, 5 or more stories	0.0%	0.0%	7.1%
Other dwellings	1.5%	1.9%	2.8%

Based on the population projections and an average of 2.4 persons per household, a certain amount of new housing will be



required. The following table outlines the projected housing demand for Rossland.

Projected housing demand for Rossland

Year	Projected Demand	
	1.0%	1.5%
2006	1749	1749
2007	1766	1775
2012	1856	1912
2017	1951	2060
2022	2050	2219
2027	2155	2391
Total Increase	406	642

The demand for housing can also be translated into demand for residential land. If all new residential growth were to be in the form of single family suburban lots (i.e. 15 units per net hectare) the land demand for 406 units would be roughly 27 net hectares exclusive of roads, parks and schools. Correspondingly, 642 units would require 43 net hectares.

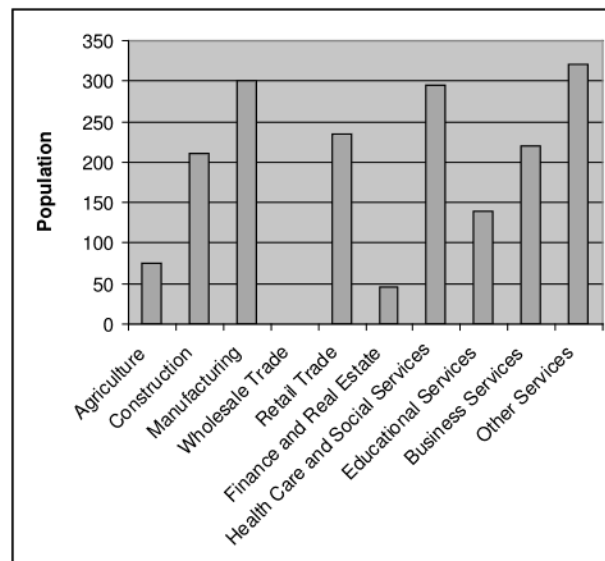
If the percentage of higher density housing forms were to be increased, the land demand would decrease. Concurrently the amount of land available for parks, trails and open space would increase. Having mixed forms of housing is especially applicable to Rossland due to the limited supply of developable land and the topographic constraints.

Economy

In 2006, the employment rate in Rossland was over 64.8%; more than 3% higher than the

provincial average.⁷ Jobs in manufacturing, construction, health and education employ the largest portion of residents in Rossland.⁸

The following graph represents the employment distribution of the population of Rossland through various industries.



Employment distribution of Rossland residents by industry - Statistics Canada 2006.

Only 26% of employed residents work in Rossland and almost 61% of employed residents work in neighbouring communities.⁸ The employers employing the most Rossland residents are: the Teck Cominco smelting plant in Trail, Trail Regional Hospital, School District #20, FortisBC (previously Aquila Networks Canada), and Red Mountain Ski Resort.

The median total income in Rossland for persons 15 years of age and over was \$31,715 in 2005 with a median total family income of

⁷ Statistics Canada. 2006 Census. Community Profiles

⁸ *Ibid.*



\$79,697.⁹ This is a similar personal income to the provincial average and a higher than average family income than the rest of the province.

There has been substantial growth in commercial activity in Rossland since 2002, with a 45% increase in the number of new businesses. As of June 2006, demand for employees has exceeded supply, indicating a healthy local economy. Overall, Rossland has attracted significant development: \$24 million in capital purchases and \$104 million planned through to 2009. Development construction within Rossland has generated a lot of employment in the local greater Trail area with \$24 million of direct and indirect employment income through 2005, and another \$119 million projected by 2009.¹⁰

With a very limited commercial and industrial tax base, the City is highly dependant on its residential tax base. In 2007 the residential tax revenue was 86% with the remaining 13% coming from retail businesses and commercial.

11

⁹ *Ibid.*

¹⁰ Todd Sanderson. 2006. "City of Rossland – Development Impact/Cost Benefit Assessment Report". (Kelowna: Grant Thornton)

¹¹ BC Assessment Roll. 2007.



10. Regional Context

The City of Rossland lies in the Rossland Range at the southern end of the Monashee Mountain range in south-central British Columbia, at a mean elevation of 1,020 metres (3,300 ft.). It is one of the highest cities in Canada. Located approximately halfway between Vancouver and Calgary, it can be accessed via Highways 3B and 22. It is approximately ten kilometres west of the City of Trail, and ten kilometres north of the U.S. border crossing at Paterson. The closest urban centres are Kelowna, BC (299 km to the North-West) and Spokane, WA (200 km to the South). Rossland is part of the Regional District of Kootenay Boundary (RDKB), which extends from the Beaver Valley in the east to the Big White Ski Resort near Kelowna in the west. The RDKB includes: Trail, Grand Forks, Rossland, Greenwood, Fruitvale, Warfield, Midway, Montrose and five rural unincorporated areas (Areas A through E). Lands outside Rossland's municipal boundary are within Electoral Area 'B' of the RDKB. The relationship between Rossland and the RDKB continues to evolve with changes to the tax load and shared services occurring over the past few years.

The effective economic unit comprises the seven local municipalities of Rossland, Warfield, Trail, Montrose, Fruitvale, Castlegar, Nelson, and Regional District of Central Kootenay (RDCK) and RDKB regional areas in the West



Photo: David Dudeck

Kootenays. The regional economy is largely driven by resource development and emerging tourism. Thirty-one percent of the income dependency in the RDKB is from mineral processing, run by Teck Cominco, which produces zinc, lead, silver, and other by-product metals, chemicals and fertilizer from its metallurgical operations in Trail. Logging and milling account for three percent of employment in the region. The Interior Health Authority is the second-largest employer in the area. There are about 500 large and small businesses operating in the RDKB. The region is also considered a premier destination for outdoor activities, including Red Mountain Resort. The climate can be characterized by fairly warm summers and cool winters with heavy snowfalls.



PART IV: COMMUNITY LAND USE DESIGNATIONS



11. Land Use Designations

The future use and development of land within the City of Rossland shall be consistent with the overall pattern of land use depicted on the Land Use Map – Schedule B, based on the following land use designations.



Photo: David Dudeck

The following table summarizes the land use designations and references relative policy sections. General policies such as those contained within Section 12 Growth Management or Section 13 Natural Hazards and Constraints may also apply in certain conditions.

Land Use Designation	Summary of Designation	Relative Policy Sections
Residential	Residential lands are those within the main townsite of Rossland currently comprising the majority of the dwelling units of the City, but excluding the higher density areas in the core. Residential development may consist of detached dwellings, duplexes, multiplexes or smaller apartment style developments. Neighbourhood scale commercial uses, artisan studios and home occupations are encouraged, providing they are at a pedestrian scale and not considered intrusive within the neighbourhoods. A mixture of housing types and tenures is also encouraged.	18
Resort Residential	Resort Residential lands are those within the resort areas of Red Mountain and Redstone. Residential development in these areas should support and enhance recreation experiences. Dwellings may consist of detached homes, duplexes, multiplexes or apartment style developments. Small scale commercial and hospitality uses are permitted.	18
Rural Residential	Rural Residential lands are generally larger lots on the fringe of the Residential Lands. They are rural in nature, typically unserved by City infrastructure and may have ancillary agricultural uses. These lands are generally considered unsuitable for intensive development until such time as the underutilized lands within the existing higher density footprint are consumed.	18, 26



Mixed Use	Mixed Use lands are generally comprised of commercial on the first floor and apartment style residential on the upper floors. Commercial uses are generally cafes, professional uses, personal services and studio space. Commercial only buildings may be allowed provided they contribute to the character of the neighbourhood. Development should be pedestrian oriented in nature with pedestrian oriented street furniture and landscaping.	20
Downtown Core	Downtown Core lands are the dominant commercial node in the community and the cultural and social focal point. Uses may include retail, restaurants, professional services, theatre, or financial institutions. Development within the core should respect the heritage character of the City and encourage pedestrian oriented movement.	19
Resort Commercial	Resort Commercial lands are intended to provide area for development to service the convenience and day to day needs of resort visitors. Uses may include restaurants, drinking and entertainment establishments, personal service establishments and tourist accommodations. Development should be pedestrian oriented in nature.	20
Gateway Commercial	Gateway Commercial lands are intended to provide lands for traveller oriented uses. Development should enhance the sense of arrival into Rossland and be sensitive to the highly visible nature of the location.	20
Institutional/Public Lands	Institutional and Public lands are intended to provide areas for community services and facilities such as schools, cemeteries, and public works buildings. These lands should be developed in such a way as to enhance the community and ensure the most effective use of the lands is promoted.	16
Light Industrial	Light Industrial land is intended to provide areas for industry such as small scale manufacturing or warehousing. Industrial development should strive to minimize potential negative impacts on ecological systems and provide screening and buffering to protect aesthetic qualities of the community.	21



Parks, Trails and Open Space	Parks, Trails and Open Space are intended to provide areas for passive and active recreation for residents, as well as protection of open space corridors and sensitive areas. These areas are not intended for development beyond facilities required to support recreation activities.	15
Resort Recreation	Resort Recreation lands are intended to provide areas to support resort recreational activities such as golfing or skiing. Development should be limited to facilities required for use and maintenance of recreation areas.	26
Resource Management Area	Resource Management lands are large undeveloped lands within the City. The designation is intended to ensure the existing natural areas within the City are protected and enhanced. Resource activities should be carefully considered in the context of the entire City, especially the impacts on views and water quality.	26



PART V: OBJECTIVES & POLICIES



12. Growth Management

Background

The traditional townsite of Rossland is comprised of predominantly single family dwellings. As development pressures increase in the City more people are drawn to the outer regions of the City and land areas immediately outside the City boundary. Large parcels of land are available for redevelopment in the traditional townsite and infill development on underutilized lands could support higher densities. The Midtown Transition Area Neighbourhood Plan also provides further policies for reference regarding infill development in the City core. The following objectives and policies will encourage redevelopment in the traditional townsite and the limiting of further sprawl.

12.1 Objectives

- .1 To ensure the built environment is designed to make efficient use of land resources and limit sprawling development.
- .2 To ensure the community contains a wide range of housing types, shops, services and employment opportunities.
- .3 To ensure the built environment is integrated with natural features.
- .4 To encourage integration of resort areas with the traditional townsite.



12.2 Policies

- .1 Encourage development of mixed use retail, service, restaurant and medium density residential development on Washington Street and nearby lanes.
- .2 Consider incentives, such as density bonusing and DCC credits for development occurring in existing infill sites that are vacant or underutilized.
- .3 Consider incentives for the reuse and adaptation of existing buildings.
- .4 Discourage development requiring further extension of municipal services.
- .5 Encourage a diverse mixture of housing types, shops and services in Rossland.
- .6 Encourage comprehensive development zoning where appropriate to provide for diverse housing types and uses.
- .7 Encourage cluster developments which are designed to protect the natural features on the site, to minimize the on site footprint of the development and to minimize road lengths.



- .8 Encourage mixed use residential and commercial development in the downtown core.
- .9 Direct higher density developments to the Downtown Core and Mid Town Transition area.
- .10 Consider higher density developments anywhere in Rossland on a project by project basis considering the character and scale of adjacent uses, proximity to transit routes, public facilities and commercial nodes and traffic and parking impacts.
- .11 Consider creating a Development Permit Area to further guide infill development.
- .12 Collaborate with the Regional District of Kootenay Boundary (RDKB), surrounding landowners and neighbouring jurisdictions in preparing a “Fringe” OCP using the SSP as a context for this initiative.
- .13 Consider defining medium and long term growth boundaries that concentrate growth in clearly defined areas that include the traditional town of Rossland, Red Mountain Resort and Redstone Golf Resort.
- .14 Establish a sustainability checklist including a high level screening test and incorporate it into all development applications.



13. *Natural Hazards and Constraints*

Background

Rossland's central core of development lies in a rolling north-south tract of land that is bounded in all directions by ridges of the Rossland Range of the Monashee Mountains. The majority of Rossland's development occurs on land with slopes between one and ten percent and substantial amounts of development occur on slopes that are between ten and 30%. A large part of the city is characterised by steep slopes (>30%) that have limited development potential. These steep slopes, the past mining history and potential fire risk are hazards that must be considered prior to development.

13.1 Objectives

- .1 To integrate the built environment into the natural environment in a way that capitalizes on ecological functions and avoids or manages risks associated with natural and mining legacy hazards.
- .2 To reduce the risk of wildfire.
- .3 To raise awareness of wildfire hazards and identify the needs for mitigative action.



13.2 Policies

- .1 Development of areas with natural or man-made hazards, such as unstable slopes or flood plains shall be avoided.
- .2 Consider defining and adopting alternative street and development standards for hillside development on slopes greater than 15%.
- .3 Apply a precautionary approach to the protection of development from hazardous conditions, until further research more specifically identifies hazardous areas. All proposals in significant watershed areas or on lands with slopes in excess of 30%, shall be required to submit a report prepared by a qualified professional, prior to the removal of trees or slope alteration.
- .4 Develop a Community Wildfire Protection Plan to identify areas that pose the greatest risk to the community. Use development Permit Area guidelines to mitigate the risk in these areas.
- .5 Examine strategies for the protection of development from wildfire through a Community Wildfire Protection Plan. Where appropriate, incorporate regulations for the development of defensible space,



community and household firebreaks, appropriate building materials or other interface fire protection strategies into Development Permit Areas, Building Regulations, Land use and subdivision servicing bylaws.

- .6 Provide public presentations and demonstrations to raise awareness of the risk of wildfire and recommended measures for wildfire prevention using the “FireSmart: Protecting your community from Wildfire” manual to guide the efforts undertaken.
- .7 Consider the risk or potential for wildfire prior to decisions being made regarding land use allocation, subdivision or development.
- .8 Development on lands suspected to have previous mining activity may require a site investigation as per the *Environmental Management Act* and may require further mitigation.
- .9 Develop and communicate a local Emergency Plan.



14. Natural Environment

Background

Rossland's spectacular setting in the alpine environment plays a large role in giving the community its unique character. Ensuring the air and water is of good quality and that sufficient greenspace is preserved is vital to the appeal of the City. The management of energy is an important element of the Official Community Plan, particularly because it is interconnected with other issues addressed by the plan, such as Growth Management, Economic Development and Transportation.

Rossland has a reasonable network of green spaces and lands for preservation of natural habitat, and has had some success in integrating the built environment with the natural landscape. Maintaining environmentally sensitive areas is significant from an environmental viewpoint, but they also offer opportunities to preserve greenspace and add to the livability of the community.

Buildings, transportation, and infrastructure are typically the largest consumers of energy in a community. The use of fossil fuels in particular results in increased concentrations of greenhouse gas emissions in the atmosphere, which contributes to global climate change. The City of Rossland has signed on to the *B.C. Climate Action Charter* with the Province and



Photo: David Dudeck

the Union of BC Municipalities, committing to become carbon neutral by 2012.

14.1 Objectives

- .1 To develop an extensive network of green spaces that include such areas as natural habitat, riparian areas, environmentally sensitive areas, water catchment areas and wildlife corridors.
- .2 To integrate development into the natural environment over time in a way that capitalizes on ecological functions and avoids or manages risks associated with natural hazards.
- .3 To preserve, protect and enhance areas defined as environmentally sensitive unless mitigating measures can be taken to minimize the negative impacts.
- .4 To establish, maintain, and enhance greenway corridors and natural habitat connectivity for wildlife movement.
- .5 To protect riparian stream corridors and wetlands in support of maintaining and enhancing fish and aquatic habitat and the overall health of the ecological system.



- .6 To ensure air quality is good and no minimum standards for air contaminants are exceeded.
- .7 To foster the conservation and efficient use of energy and other resources in buildings, vehicles and infrastructure and to foster a reduction in greenhouse gas emissions.
- .8 To encourage green building practices.

14.2 General Policies

- .1 Follow the Development Permit Area guidelines for the protection of the natural environment outlined in Part VII of Schedule A.
- .2 Focus development in areas where it will pose the least interference with the natural environment.
- .3 Require appropriate environmental impact mitigation measures on sensitive lands and steep slopes such as: elimination/reduction of cuts/fills on slopes; non-disturbance of riparian areas; slope stability measures such as tree planting or retention of native coverage; and/or, post development offsite storm water drainage levels shall not exceed pre development levels.
- .4 Require a preliminary environmental impact assessment to minimize any potential impacts from proposed developments in environmentally sensitive areas.
- .5 Encourage outdoor recreation development in areas where the type and location of such activity does not pose a

conflict with the preservation of natural water courses.

- .6 Preserve, whenever possible, all forest stands age class 7 or older, while continuing to review the use of these lands in the broader context of community land use requirements.
- .7 Establish a plan to minimise noxious and invasive weeds.
- .8 Encourage cluster development to allow the protection of natural features on the site, to minimize the on-site footprint of the development and to minimize road lengths.
- .9 Require the provision of public access to key natural amenities when considering new development proposals.
- .10 Explore the opportunity to develop a natural resource inventory and base mapping program which includes green space, trails and environmentally sensitive areas to provide baseline information.
- .11 Explore opportunities during redevelopment to daylight creeks.
- .12 Review incentives for conservation in the municipal policies (e.g. conservation covenants).
- .13 Identify and when possible, secure ribbons of nature extending into town, including green ribbons along the streams (Trail Creek), along streets and those required for the protection of viewsapes.
- .14 Refine, where possible, parkland acquisition actions to incorporate more riparian buffers, trails between character



neighbourhoods, pocket parks, drainage improvements, and green infrastructure.

- .15 Encourage reclamation, enhancement and mitigation of wildlife habitat.
- .16 Identify environmentally sensitive areas. Such a study would likely focus on the alpine, sub-alpine, riparian zones and wetlands, steep slopes and any areas of special value to wildlife habitat or movement.
- .17 Seek opportunities to develop strategies to reduce vulnerability to and adapt to climate change impacts in collaboration with federal and provincial agencies, the Regional District of Kootenay Boundary, research organizations, the academic sector and others.
- .18 Adopt a tree retention bylaw.

14.3 Water Policies

- .1 Work in cooperation with federal and provincial agencies to ensure that developments:
 - Provide and protect riparian habitat; ensure no-build strips adjacent to all fish habitat;
 - Control soil erosion and sediment in runoff;
 - Control the rates of storm water runoff and minimize their impact on watercourses;
 - Minimize the impact of in-stream work and other construction activity;

- Prevent the discharge of deleterious substances to watercourses;
- Maintain fish passages in watercourses for all salmonid life stages;
- Protect habitat of provincially designated Red (endangered) and Blue (rare) species of birds, wildlife and plants;
- Retain natural creek beds and severely restrict the use of culverts
- Deter burying creeks and natural drainages;
- Deter damming of natural drainages;
- Conduct shadow casting studies to ensure that canopy foliage is preserved;
- Extend setbacks in steep and unstable embankment areas; and
- Provide foliage replacement after a disturbance.

- .2 Avoid degradation of fish and aquatic habitat. Where this is not possible, mitigation or compensation shall be required. Mitigation can include but is not limited to the daylighting of creeks and drainages and can also include the placement of weirs to re-establish or recover previously lost areas.
- .3 Protect existing stream flow volumes by minimizing disruption or displacement of streams and stream features.
- .4 Minimise reliance on base creek flows to ensure the health of downstream ecosystems.



14.4 Energy Policies

- .1 Support transportation initiatives that increase fuel efficiency.
- .2 Consider developing a Community Energy Plan that sets targets and is integrated into land use planning.
- .3 Support projects that aim for carbon neutrality and demonstrate new energy efficient technologies with the objective of meeting a GHG reduction target of 33% below Rossland's 2007 GHG emissions' levels by 2020.
- .4 Encourage Leadership in Energy and Environmental Design (LEED) equivalent standards and green building practices in all development. The City may consider incentive programs to encourage incorporation of LEED standards in developments.
- .5 Support an acceptable reduction and/or replacement of the City's street lights to decrease night time light pollution, reduce energy consumption and operational costs.

14.5 Air Quality Policies

- .1 Consider adopting an air quality bylaw to protect air quality for Rossland in the long term.
- .2 Take action to reduce idling vehicles.
- .3 Support the replacement of inefficient wood burning stoves in residential dwellings and the eventual phasing out of traditional fireplaces which produce high levels of emissions.

14.6 Bear Management Policies

- .1 The City of Rossland will work towards becoming a Bear Smart Community in accordance with the provincial Bear Smart Community Program.
- .2 Bear habitat mapping and travel corridor data will be considered as part of the environmentally sensitive areas mapping.
- .3 Support continued community education about attractant management and Bear Smart principles.
- .4 Develop approaches which harmonize bear aware approaches with competing community interests such as the establishment of local agriculture.



15. Parks and Trails

Background

Rossland's spectacular setting in the alpine environment gives the community much of its special appeal. The residents of Rossland lead active lifestyles year-round, and have a variety of recreation opportunities. Parks, open space, trails and recreation are highly valued by residents.

15.1 Objectives

- .1 To maintain and develop a well-integrated and linked system of parks, trails and associated recreational facilities to serve the needs of residents and visitors.
- .2 To ensure green spaces and parks are publicly accessible and well distributed through the community and enable residents and visitors of all ages to enjoy these spaces.
- .3 To ensure a world class network of designated, connected, accessible and well maintained trails exists throughout the community.

15.2 Policies

- .1 Develop an Integrated Greenspace, Trails and Recreation Master Plan that considers the community's requirements and clearly sets out which parks have priority for improvement when funding permits. In



addition, it should include a plan for revitalizing, establishing or extending parks.

- .2 Consideration will be given to density bonusing of development proposals which include a high degree of parkland dedication and open space.
- .3 Consider improvements to existing park facilities prior to developing new parks and facilities in order to avoid high construction and maintenance costs.
- .4 Recognize the significance of the "Chinese Gardens" by developing an interpretive centre and incorporating this into the parks and trails system.
- .5 Support the establishment of pedestrian linkages beneath/over/across Highway 3B for year-round access between:
 - a. The Red Mountain Base area and the Blackjack Cross Country Ski Club;
 - b. The lower Rossland Happy Valley Area and the Redstone Golf Course area, with the specific intent on establishing a connection to link the



historic Rossland cemetery with the historic Wagon Road.

c. Pinewood neighbourhood area and lower Rossland.

- .6 Continue working with and supporting local trail user groups to create and maintain a comprehensive trail inventory.
- .7 Seek easements on private land parcels that currently host trails wherever possible.
- .8 Identify and secure pedestrian corridors between neighbourhoods and amenities in town, and between town and the resorts, and between the town and the trail system.
- .9 Ensure trail connectivity is maintained when new areas are developed in Rossland or across municipal boundaries.
- .10 Ensure there is good public access to the key natural amenities.
- .11 The provision of usable parkland or money in lieu of parkland at the time of subdivision for any developments throughout Rossland shall be at the discretion of the municipality pursuant to the *Local Government Act* in order to implement the policies and designations in the Official Community Plan.
- .12 Work with other user groups and other agencies to explore multi use corridors in Rossland to avoid user conflicts.
- .13 Encourage the development of a trail along Trail Creek.
- .14 Explore ways to restore the old Railgrade through town.
- .15 Support the development of informational brochures to highlight the linkages within settled areas of Rossland.
- .16 Further develop the parks and trails system consistent with the Trails Map - Schedule C. This would include creating bike paths along the edges of paved roads.
- .17 Support collaboration with the region's municipalities to identify and develop off-road pedestrian/cycling routes, specifically a Rossland to Nelson route via Salmo and Castlegar and to Christina Lake via the Old Cascade Highway.



16. *Community Services & Facilities*

Background

Rossland residents consider their community to be relatively safe, inclusive and welcoming. Residents of all ages are engaged in the town's arts and cultural activities and offerings, and actively participate in community groups and celebrations of community spirit. The small town character and feel of the community is currently thriving, but steps need to be taken to protect this valuable social amenity. Rossland has a wide variety of recreation facilities that goes well beyond other communities of a similar size, partially due to the high level of volunteerism to maintain the facilities.

16.1 Objectives

- .1 To ensure new residents, non-permanent residents and visitors of all ages, ethnicities, cultures, and lifestyles are welcomed and integrated into the community.
- .2 To encourage residents of all ages to engage in the town's arts and cultural activities and offerings, and actively participate in community groups and celebrations of community spirit.
- .3 To ensure schools, public amenities and community facilities are operated and designed in ways that provide residents and visitors of all ages and abilities with safe, accessible and convenient spaces for social, artistic and cultural expression and activity.
- .4 To encourage integration and shared community use of schools and other institutional facilities to provide amenities to the community.
- .5 To have a broad range of educational opportunities provided within Rossland, including public school education, post-secondary education, early childhood education, continuing education, and specialized and alternative education programs.
- .6 To maintain and enhance Rossland's unique sense of place and promote community identity.
- .7 To conserve energy, water, materials and other resources in institutional buildings.
- .8 To develop a diverse amount of appropriate facilities, programs, and services for the community to meet present and future needs including but not limited to services for youth, seniors, children and families.



Photo: David Dudeck

- .9 To ensure a full curriculum of public education from kindergarten through grade 12 is provided within Rossland.

16.2 General Policies

- .1 Consider proactive methods to welcome newcomers to the community and encourage diverse ethnicities, cultures and lifestyles.
- .2 Consider establishing a coordinated strategy for arts and cultural events in the community.
- .3 Design and operate public amenities, schools and community facilities in ways that provide residents of all ages with safe and convenient spaces for social, artistic and cultural expression and activity.
- .4 Locate community facilities and uses in areas where they best serve the needs of residents and visitors while optimizing positive economic impacts.
- .5 Direct local, provincial and federal government offices to areas designated as Downtown Core and Mixed Use in Schedule B.
- .6 Use institutional facilities (new and old) to showcase sustainable alternative building standards.
- .7 Develop a signage bylaw outlining size, colour, style and other details pertaining to acceptable use of signs within the City.

16.3 Recreation and Community Facilities Policies

- .1 Establish a multi-use community centre/ facility(s) where appropriate, and when funding is available.
- .2 Permit Churches and other places of worship in areas designated as Residential "R", provided facilities not include a school or a large dormitory.
- .3 Consider establishing community gardens where feasible and appropriate.
- .4 Conduct a demand and supply study of community recreational and leisure facilities and consider preparing a plan to revitalize the arena.
- .5 Support the continuation of library services in Rossland.

16.4 Education Policies

- .1 Continue to encourage dialogue with the School Board to ascertain the status of existing school facilities and size, number, location, and timing of anticipated new school facilities.
- .2 Cooperate with governments and their agencies at all levels, and with community organizations and businesses, to expand the use of Rossland's secondary and elementary schools.
- .3 Wherever possible enable the provision of a broad range of educational opportunities, including public school education, post-secondary education, early childhood education, continuing education, and



specialized and alternative education programs within Rossland.

- .4 Cooperate with the community's education, business, heritage, cultural and recreation sectors in order to provide the community with a broad range of opportunities, facilities, and extra-curricular activities which complement and strengthen core public education in Rossland.
- .5 Encourage the sharing of fields, playgrounds and recreational facilities with the School District.
- .6 Consider partnering with higher education institutions to provide post secondary education opportunities in Rossland.

16.5 Intergenerational Policies

- .1 The essential role of seniors in Rossland is gratefully acknowledged. It is important that their changing housing needs and support services be recognized and properly addressed within the community.
- .2 Support the use of City owned lands to site facilities for children, youth and seniors including but not limited to day care, a skateboard park and elderly care.
- .3 Develop a diverse amount of appropriate facilities, programs, and services for the community to meet present and future needs including but not limited to services for youth, seniors, children and families.
- .4 Establish strategies to retain and attract healthcare services and facilities in Rossland and to provide convenient

transportation access for the aging population.

16.6 Safety Policies

- .1 Collaborate with the RCMP on crime prevention efforts where possible to enhance the safety and vitality of Rossland.
- .2 Continue supporting police and fire protection services using Crime Prevention through Environment Design principles in order to ensure a safe and liveable community.



17. Heritage

Background

Rossland has a unique cultural and built heritage, spanning over a century. There are currently many buildings and landmarks that originate from the resource mining days of Rossland's inception, serving as a reminder of the City's history. Continued and new efforts should be made to ensure the rich heritage of the City of Rossland is maintained and enhanced. Stewardship and preservation can present financial challenges so creative measures to achieve this are necessary.

17.1 Objectives

- .1 To remain a community that honours its heritage, respects civic duty and responsibility, and is dedicated to preserving and building a legacy of community values for future generations.
- .2 To preserve historic buildings, monuments, sites and natural features in ways that maintain and promote Rossland's heritage and unique 'sense of place'.

17.2 Policies

- .1 Establish a Community Heritage Commission and develop a Community Heritage Plan.
- .2 Continue to support the museum and work towards establishing a display to advertise



Photo: Royal BC Museum

the presence of the museum in the downtown and include it as part of the heritage walk.

- .3 Formalize the heritage walking tour route and develop a podcast version of the tour as funding permits.
- .4 Develop information signage for heritage buildings and sites.
- .5 Consider a review and update the Design Guidelines for Downtown Rossland.
- .6 Encourage new developments and the redevelopment of established areas to incorporate natural and local materials for building, including timber and rock representative of the area as well as use of indigenous trees and plants for landscaping to maintain the heritage character of the area.
- .7 Review and update the Heritage Building Register (1985) as a way to protect and encourage restoration of heritage buildings.
- .8 Assist properties owners, where possible, with technical information relating to the conservation, protection and rehabilitation of heritage resources.
- .9 Research the possibility of providing community and economic incentives (such



as property taxation incentives) for property owners to assist with the protection and rehabilitation of the City's heritage resources.

- .10 Pursue restoration of Columbia Cemetery through signage and improved access.
- .11 Create a 'Historic Trail Creek' vantage point along the Wagon Road with appropriate signage to show the historical significance of this valley.
- .12 Support groups and individuals who celebrate Rossland's history and heritage.



18. *Housing & Residential Lands*

Background

Nearly 90% of the housing units in Rossland are single detached dwellings. Of these some 49% were built before 1945, with an additional 20% built between 1945 and 1960. Over 80% of these homes are permanently occupied; the remaining portion of housing stock is comprised of rented dwellings, which are mostly low rise (less than 5 stories) apartment buildings.

Housing prices have risen substantially since 2001, and affordability is a growing concern among residents. The following objectives and policies address housing affordability through diversity, efficiency, innovation and flexibility.

18.1 Objectives

- .1 To ensure that all permanent residents and seasonal employees have access to healthy, liveable, and affordable housing and accommodation in Rossland.
- .2 To provide a variety of accommodation types, tenures, and sizes ensuring that residents of all ages and incomes have a diversity of market and non-market housing choice.
- .3 To design and locate housing in such a way as to minimize long-term operating costs, infrastructure investments and environmental footprints.



Photo: David Dudeck

18.2 General Policies

- .1 Establish a housing task force for Rossland with a mandate to research housing needs and work with stakeholders to implement solutions that will encourage a socio-economic and demographic mix.
- .2 Develop non-market housing solutions for various demographic cohorts with consideration to age and income.
- .3 Encourage the development of a housing project to create seniors housing that is prioritized for local seniors moving out of single-family homes.
- .4 Encourage development that does not require extension of municipal services.
- .5 Encourage secondary suites provided the suite is registered with the City of Rossland; the property can conform to the parking and setback regulations set out in the City of Rossland Zoning Bylaw; the suite conforms to all building and fire codes; and the presence of a suite does not detract from the quality of life of nearby residents.
- .6 Encourage home based businesses where the use is deemed appropriate and not



intrusive within the neighbourhood, is licensed and has adequate parking.

- .7 Encourage Bed and Breakfast operations provided the facility is appropriately located, meets current regulations and bylaws and is not intrusive within the neighbourhood.
- .8 Support the use of City owned land to encourage the development of alternative housing.
- .9 Consider a policy for addressing the residential strata conversion of previously occupied buildings.
- .10 Monitor growth of second home ownership and assess the long term impacts of second home ownership on the community.
- .11 Encourage and support employee housing.

18.3 Residential Policies

1. The following policies apply to the lands designated as Residential on the attached Schedule B Land Use Map.
2. Encourage development that enhances and maintains Rossland's heritage.
3. Encourage higher density multi-family uses, especially nearest the Downtown Core and the Mid Town Neighbourhood Special Planning Area.
4. Ensure all new multi-family residential developments, including duplexes, are designated as a Development Permit Area to ensure new multi-family developments are compatible with the scale, character

and heritage of existing residential neighbourhoods.

5. Encourage a wide range of housing types, tenures and organizational frameworks including ownership, lease, rental, strata title, side by side duplex and co-op housing.
6. Consider density bonusing or other development incentives in return for providing affordable or special needs housing or green buildings.
7. Neighbourhood commercial such as small scale cafes or pedestrian oriented retail services can be considered in any Residential Neighbourhood designation subject to the following:
 - A location near key intersections (i.e. intersection of two arterial roads or a collector and an arterial road) or on a major road;
 - Adjacent to other neighbourhood amenities such as parks or existing commercial uses;
 - Site design and building form and character that complements the adjacent residential neighbourhood; and,
 - Appropriate zoning.
8. Allow the use of comprehensive development zones to allow a wider mix of uses and housing types.
9. Encourage cluster development to allow the protection of natural features on site, to



minimize the on-site footprint of the development and to minimize road lengths.

10. Consider higher density developments anywhere in Rossland on a project by project basis. When reviewing rezoning proposals for multi-family residential development, the City shall consider the following criteria in determining the appropriateness of the development:

- Walking distance to commercial, recreational, public/institutional centres, or parks;
- Proximity to major collectors or arterial roads in order to reduce traffic impacts on local roads and facilitate transit service;
- Adequacy of existing services;
- Potential of the proposed development to provide a range of housing types and tenures that are suitable for seniors, households with low and moderate incomes, and persons with special needs;
- An appropriate transition between lower density housing, and compatibility with adjacent land uses;
- The range of densities and housing forms in the residential neighbourhood;
- Aesthetic quality including massing, scale, building form, view and shadow impacts;

- Protection of the proposed development from natural hazards;

11. Encourage infill housing in order to improve economic efficiency regarding municipal services and maintenance. To that end, support residential lots, in areas serviced by municipal water and sewer, in areas that can satisfy the requirements of the City of Rossland Subdivision and Servicing Bylaw and Zoning Bylaw.

12. The City of Rossland will pursue green building guidelines and incentives for all buildings, including residential and multi-unit residential buildings.

13. Infill (small lot) development in existing residential neighbourhoods may contrast with the character of the surrounding structures in terms of lot size, building massing, height, setbacks, form and character. To address this, the City will consider creating a Development Permit Area (Intensive Residential) to further guide infill development.

14. Consider Guest House rezoning applications in those areas with the following criteria:

- i. The density of Guest Homes in the vicinity of the property which is being proposed to be rezoned for Guest Home use;
- ii. The road network and parking issues that may exist or arise in the vicinity of the property which is being proposed



- to be rezoned for Guest Home use;
and
- iii. Future land use changes which may occur in the vicinity of the property which is being proposed to be rezoned for Guest Home use in light of objectives and policies of the Official Community Plan.

- .15 Consider updating the DP Area guidelines for form and character for multi-family developments.
- .16 Recognize the importance of mobile homes as an affordable housing element and permit their location in the mobile home park zone as outlined in the Zoning Bylaw.

18.4 Resort Residential Policies

- .1 The following policies apply to the lands designated as Resort Residential on the attached Schedule B Land Use Map.
- .2 Encourage development that supports and enhances resort recreation opportunities and experiences.
- .3 Encourage development that is clustered to promote protection of sensitive lands.
- .4 Encourage integration of alternate transportation methods such as walking, skiing and cycling, into the design of developments.
- .5 Consider small scale commercial and hospitality uses that support and enhance the resort experience.

- .6 Ensure all new multi-family residential developments, including duplexes, be designated as a Development Permit Area to ensure new multi-family developments are compatible with the scale of the resort environment.
- .7 Support the establishment of small commercial nodes within the resort accommodations in order that resort visitors can shop for basic commodities without driving.

18.5 Rural Residential Policies

- .1 The following policies apply to the lands designated as Rural Residential on the attached Schedule B Land Use Map.
- .2 Permit development that can not be readily connected to municipal services providing the site can accommodate on-site sewage disposal and provide potable water.
- .3 Require a minimum parcel size of 2 hectares (5 acres) within the Rural Residential area.
- .4 Require a report certified by a Qualified Practitioner, competent in the field of soil investigations and on-site septic disposal, regarding the suitability of the site for the proposed use, the design of the proposed septic disposal system and the operation and maintenance of the proposed septic disposal system prior to development. This report is to be registered against the title of the property.



- .5 Permit parcels that existed prior to adopting this Plan and are less than 2 hectares (5 acres) to be developed in such a manner as to not increase the existing density.
- .6 Use the existing zoning to preserve the greenbelt surrounding Rossland.



19. Downtown Core

Background

Downtown Rossland is an attractive and desirable place to be. There is a strong heritage character that is genuine rather than manufactured. The downtown core could be further densified and care must be taken to ensure that redevelopment is completed in such a way as to complement the existing heritage structures. Challenges within the downtown core include large blocks of privately owned land, truck traffic and aging building stock.

19.1 Objectives

- .1 To ensure that the Downtown Core is maintained as the dominant commercial node in the community as well as a cultural and social focal point.
- .2 To increase the density and diversity of uses in the downtown.
- .3 To establish auto-free areas in the downtown core, areas dedicated primarily for pedestrian (not vehicular) movement.

19.2 Policies

- .1 The following policies apply to the lands designated as Downtown Core on the attached Schedule B Land Use Map.



Photo: Rossland Chamber of Commerce

- .2 Mixed uses (upper floor residential with ground floor commercial or office) shall be encouraged in the Downtown Core area.
- .3 Ensure all new development and major renovations and expansions within the Downtown Core are of a high quality and contribute to the heritage and character of Rossland. To this end, Council intends to enforce the Development Permit Area guidelines set out in Section 32 of this Bylaw. These guidelines will be reviewed and updated to ensure ease of understanding and use.
- .4 The area designated Downtown Core on Schedule B is intended to function as the primary shopping, business, tourist, cultural and social node of the community with a distinctive quality and sense of place. As such, a broad range of concentrated pedestrian-scale uses including residential, retail, office, financial, institutional, service, entertainment, food and beverage and visitor accommodation are supported.
- .5 Encourage higher density residential within the Downtown Core.
- .6 Encourage redevelopment of underutilized lands and the development of vacant



lands for mixed commercial-residential uses.

- .7 Collaborate with Ministry of Transportation to encourage Best Management Practices and Standards for Highway upgrades through the Downtown Core, which encourage pedestrian movement and safety and mitigate wherever possible, negative impacts from truck traffic.
- .8 Collaborate with Ministry of Transportation on the proposed Columbia Ave resurfacing in order to introduce natural landscape features, traffic calming designs, improved parking and a designated, separated bike lane.
- .9 The Downtown Core shall be as pedestrian and bicycle oriented as possible.
- .10 Further develop Washington St and nearby lanes as the location of mixed use retail, service, restaurant and medium density residential development.
- .11 Continue to support a downtown and streetscape revitalization program.
- .12 Supports capital investments in Downtown, including streetscape improvements, street furniture, public art and landscaping to increase the attractiveness of Downtown.
- .13 Comprehensive trail connections and cyclist/pedestrian routes to and within the Downtown are a priority in the downtown transportation system.
- .14 Encourage outdoor seating for restaurants, cafes and bars provided that surrounding residential neighbourhoods and pedestrian movement are not adversely affected.

.15 Investigate possibilities for parking areas adjacent to the Downtown Core.

- .16 Require a rezoning application to determine specifics of commercial zoning in the areas designated Proposed Downtown Commercial on the land use map, Schedule B.



20. Commercial Lands

Background

The downtown is currently the commercial core of Rossland, with commercial nodes emerging in both the Red Mountain and Redstone resort areas. Commercial development is somewhat limited at this time and future development should consider the downtown core as the main commercial node, encouraging a mixture of uses. Pedestrian oriented and home based business throughout should also be encouraged to promote the expansion of employment generating lands within Rossland.

20.1 Objectives

- .1 To ensure that the historic townsite is maintained as the commercial, cultural and social focal point of the community.
- .2 To ensure that commercial developments, including resort-related enterprises and new industry, are located and operated in ways that are compatible with the community's social fabric, high quality of life and environment.
- .3 To promote an expanding commercial sector within Rossland including knowledge and home based businesses.



Photo: Rossland Chamber of Commerce

20.2 General Policies

- .1 Big-box commercial developments shall be discouraged from locating in the Rossland area.
- .2 Continue developing Washington Street as the town's second commercial street, up to 4th Avenue. Include a commercial component on the Washington side of the Emcon lands and possibly develop on the parking lots near street intersections, encouraging retail services mixed with medium/high density residential development.
- .3 Encourage pedestrian scale design that features architectural treatments: benches, trail linkages, directional signage via international symbols, public art and dark sky lighting.
- .4 Encourage and maintain a difference in the character of the town and that of Red Mountain Resort. Enhance the cultural and heritage aspects of the Downtown Core while maintaining the resort as an individual node that complements the Downtown with an individual Alpine style. Ensure development within the Downtown Core



enhances and maintains the current heritage and ‘Miner’s Town’ style.

- .5 Provide for a range of commercial uses by designating land for various forms of commercial uses in order to meet the needs of local residents, visitors to Rossland and the travelling public.
- .6 Ensure all commercial development is of a high standard and fits in well with Rossland’s heritage and character. To achieve this all commercial development will be subject to Development Permit Guidelines for form and character.
- .7 Commercial Development shall be encouraged to locate in nodes that promote pedestrian/cycling accessibility. Those lands designated as Downtown Core, Mixed Use, Gateway Commercial and Resort Commercial are areas where commercial development is appropriate with the Downtown Core as the primary commercial, cultural and social node of the community.
- .8 Strip development shall be discouraged along all highways within Rossland.
- .9 Support mixed use development on the lands designated as Downtown Core, Mixed Use, and Resort Commercial on the attached Schedule B Land Use Map.
- .10 Encourage revitalization through commercial development in neglected downtown core areas.
- .11 Neighbourhood commercial is considered an integral feature of complete communities as it provides for the daily

requirements of local residents, reduces automobile reliance and provides a focal point and identity for the neighbourhood it serves.

- .12 Notwithstanding the existing zoning, the issuance of Temporary Commercial Use Permits may be considered by Council only in areas designated as Gateway Commercial, Mixed Use, Resort Commercial, Light industrial or Downtown Core on Schedule B of the Official Community Plan, subject to the conditions contained in the *Local Government Act*.

20.3 Gateway Commercial Policies

- .1 The following policies apply to the lands designated as Gateway Commercial on the attached Schedule B Land Use Map.
- .2 Development within the lands designated as Gateway Commercial shall consider the highly visible nature of the location and may be required to provide landscaping and screening as necessary to maintain the highway corridor to a high standard.
- .3 Encourage development within the Gateway Commercial area that enhances the sense of arrival into Rossland.
- .4 Create gateways to signify a sense of arrival to the Rossland Core.
- .5 To avoid typical strip type development in the Gateway Commercial area, Council intends to enforce the Development Permit Guidelines set out in Section 36 of this Bylaw.



- .6 Require a rezoning application to determine specifics of commercial zoning in the areas designated Proposed Gateway Commercial on the land use map, Schedule B.

20.4 Mixed Use Policies

- .1 The following policies apply to the lands designated as Mixed Use on the attached Schedule B Land Use Map.
- .2 Encourage development of mixed use buildings with commercial development on the ground floor and residential development on upper floors.
- .3 Allow commercial buildings provided they contribute to the character of the surrounding neighbourhood.
- .4 Encourage appropriate commercial uses that complement rather than compete with the Downtown Core, such as restaurants, professional offices, personal services, and studio space.
- .5 Encourage pedestrian scale elements which blend in with the character of surrounding neighbourhoods.
- .6 Further policies guiding this designation can be found in the Mid Town Area Special Planning Area.
- .7 Encourage the development of soft impact production uses in structures which blend in and co-exist with residential development in the area designated Proposed Mixed Use/Small Scale Production on Schedule B-Land Use Map. Require a rezoning

application to determine zoning specifics such as location, uses and density.

20.5 Resort Commercial

- .1 The following policies apply to the lands designated as Resort Commercial on the attached Schedule B Land Use Map.
- .2 Development within the Resort commercial designation shall be of an appropriate scale and type to service the convenience and day to day needs of resort visitors.
- .3 Consider appropriate commercial uses including resort-related commercial services, eating, drinking and entertainment establishments, personal service establishments and tourist accommodations.



21. Industrial Land

Background

Rossland currently has limited land for light industrial uses, and no land for heavy industrial uses. The lands currently designated as light industrial should be protected from encroaching development to ensure future requirements can be met. The City strives to support existing light industrial uses and encourages the further expansion of industry, such as small scale niche manufacturing. Heavy industrial enterprises are not pursued nor encouraged for the Rossland area due to the existence of more suitable lands within the region, and the existence of long established heavy industrial uses such as Teck Cominco located in Trail.

21.1 Objectives

- .1 To protect the limited amounts of land designated for Light Industrial from the encroachment of non-compatible land uses and to minimize conflicts between adjacent land uses.
- .2 To support the retention and establishment of Light Industrial to encourage a range of employment opportunities for existing and future residents of Rossland.
- .3 To ensure that the nature and design of any future industrial operations are such that the community's quality of life and environment are not adversely affected.



- .4 To encourage industrial development that conserves energy, water, materials, and other resources.
- .5 To consider the potential for establishing an 'Eco-Industrial Park' in collaboration with the surrounding region.

21.2 Policies

- .1 Create an Industrial Development Permit Area to ensure adequate screening and buffering of industrial uses from other uses. Protect the aesthetic quality of the community through appropriate landscaping, and building design, open space preservation and protection of view corridors and scenic areas from newly created Light Industrial developments. The Screening and Landscaping Buffers provision of the Zoning Bylaw should be applied to sites rezoned to Light Industrial.
- .2 Encourage new industries that are relatively clean and environmentally sensitive to locate within Rossland.
- .3 Encourage relocation of any industrial operations that may create land use conflicts with adjacent properties, such as



the City Works Yard in the Third Avenue area.

- .4 Discourage industrial developments on the Cascade Highway site that are not fully serviced with water and sanitary sewer.
- .5 Ensure that industrial operations minimize potential negative impacts on ecological systems and processes and the urban environment, particularly with respect to air and water quality and noise and traffic levels.
- .6 Consider properties immediately outside the municipal boundary along the Old Cascade Highway for a boundary expansion and inclusion in the Light Industrial designation.
- .7 Consider development of a “Light Industrial Business Park” in the Old Cascade Highway area. The ultimate goal will be a comprehensively planned area of high aesthetic quality achieved through appropriate design guidelines and standards.
- .8 Protect the land designated Light Industrial along Cascade Highway for future industrial development and support an expansion of this zoning to the lands adjacent to that Light Industrial area.
- .9 Consider collaborating with neighbouring and regional governments to establish a regional supply of employment lands in close proximity to Rossland.
- .10 Notwithstanding the existing zoning, the issuance of Temporary Industrial Use Permits may be considered by Council only in

areas designated as Gateway Commercial or Light Industrial, on Schedule B of the Official Community Plan, subject to the conditions contained in the *Local Government Act*.



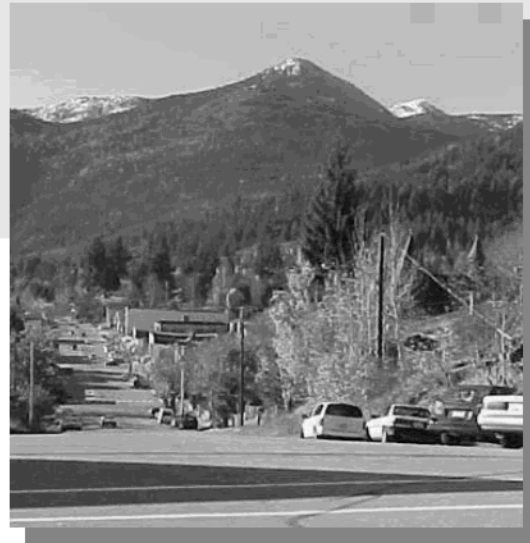
22. Transportation

Background

Currently a networked system of trails for walking, hiking, biking and skiing connects Rossland from a recreation perspective, but does not serve to reduce vehicular movement as a dominate method of travel. The downtown is not well linked by transit to resort areas and has infrequent service to Trail. The downtown also experiences high traffic volume, including truck traffic as Highway 22 runs through the core. There is not a formal gateway or entrance to downtown Rossland, or greater Rossland.

22.1 Objectives

- .1 To develop a trail network for walking, hiking, biking and skiing that allow for access to all parts of Rossland and the surrounding region.
- .2 To establish ‘gateway’ entrances to Rossland and the downtown core for both vehicular traffic and for pedestrians/cyclists which foster a sense of arrival and provide information about the uniqueness and spirit of the community of Rossland.
- .3 To develop affordable, accessible, reliable, frequent, safe and comfortable alternative



modes of transportation to minimize private vehicle dependency (ownership).

- .4 To provide alternatives to the private vehicle for transportation to and from the resorts and neighbouring communities for residents and visiting tourists.
- .5 To encourage transportation systems that utilize renewable energy sources and have minimal impact on air quality.
- .6 To establish traffic patterns that are the least hazardous to pedestrians.
- .7 To discourage traffic generation.

22.2 Policies

- .1 Through an expanded utilization of developed and non-developed local right-of-ways, encourage the further development of a trail network that allows alternate methods of transportation such as walking, biking and skiing to become more predominant.
- .2 Work toward establishing ‘gateway’ entrances to the community along the



major vehicular and major non-vehicular (pedestrian/cycling trunk) transportation corridors.

- .3 Explore the opportunity for private – public partnerships to help encourage the development of additional public transit within Rossland.
- .4 Encourage transportation systems that are more fuel efficient and/or utilize renewable energy sources which have minimal impact on air quality wherever possible.
- .5 Explore the opportunity for greening the City's fleet with more fuel efficient, cleaner utility vehicles.
- .6 Explore the potential for incentives and/or partnerships with inter-regional transportation companies or developers to provide transportation options.
- .7 Identify and secure pedestrian corridors between neighbourhoods in town and between town and the resorts.
- .8 The quality of pedestrian areas directly affects the overall image of a place, the quality of experience and the propensity for people to walk rather than drive. Recognizing this, efforts will be directed to such measures as:

- Reducing travel lane widths;
- Reducing street crossing distances;
- Off-road (but possibly on-boulevard) pathways for cyclists and pedestrians;

- Provision of pedestrian-scale lighting;
- Soft and hard landscaping accents; and,
- Street furniture.

This pedestrian-friendly design can be achieved where possible through capital improvement projects, capital works projects, new development and/or substantial renovation to existing buildings.

- .9 The City recognizes the importance of accessibility for seniors and the mobility-impaired. The City supports designs that accommodate these user groups, particularly in the Downtown Core and in public gathering places.
- .10 It is a policy of Council to integrate bicycle and pedestrian needs into community planning, design and maintenance.
- .11 The Transportation Network Plan in Schedule D and Trail Network Plan in Schedule C is adopted in order to accommodate the movement of pedestrians, bicycles, transit vehicles, cars and trucks. Implementation of these network elements shall take place in a phased manner as necessitated by growth.
- .12 The development and implementation of a trail network master plan, in co-operation with the RDKB, integrating recreational and urban trails is supported as described in the Parks and Trails section.



- .13 The provision of end-of-trip facilities for cycling, such as appropriately designed and located bicycle racks, is encouraged.
- .14 The City of Rossland will utilize a variety of mechanisms, including Development Cost Charges, developer contributions and capital expenditure to finance road infrastructure upgrades and expansions. Prior to expending public funds for capital projects, the municipality will assess the short and long term implications of such expenditures.
- .15 Consider conducting a transportation study to address traffic patterns, safety, parking and potential congestion.
- .16 Encourage formalizing the informal trail system linkages within the settled areas.
- .17 Explore the opportunity to develop a funicular tram from lower Rossland to downtown and a lift linking Rossland to Red Mountain.
- .18 Consider creating communal parking areas in old neighbourhoods with limited off-street parking.
- .19 Consider implementing traffic calming techniques to reduce and/or control speeds.
- .20 Establish the primary preferred transportation route for traffic travelling between Warfield, downtown and Red Mountain as via the museum on the main Highway 3B. Sign and map this route on all visitor and City maps.



23. Utilities

Background

Rossland is fortunate to have some control over most of the lands within the watershed that contribute to the City's water supply, as they are mostly within the City Boundary. Infrastructure for storm, sewer and potable water may be aging in some areas, but proactive upgrading will help to ensure a system that meets the needs of current and future residents.

23.1 Objectives

- .1 To ensure that water sources and reservoirs provide water of sufficient quality and quantity to service the needs of the town.
- .2 To ensure potable water provision, storm water management and flood control measures are designed to maintain the integrity of streams, lakes, riparian areas and wetlands, while adequately servicing residents in a reliable, efficient and affordable manner.
- .3 To promote conservation of potable water and preserve the highest quality water for domestic drinking.
- .4 To reduce the need for the landfill through community education programs and the implementation of recycling, reusing and reducing programs.
- .5 To ensure all activity occurring within the water supply catchment areas is



undertaken in an environmentally sensitive manner that gives highest priority to protecting water supplies and quality.

- .6 To ensure that utilities and municipal infrastructure are planned to accommodate the existing and future needs of Rossland's resident and visitor population.
- .7 To provide leadership in sustainable municipal infrastructure servicing.
- .8 To ensure that all utilities are self-funding, with rates providing for life-cycle costing.

23.2 Policies - General

- .1 Establish a Master Infrastructure Plan and Development Maintenance Plan.
- .2 Extension of municipal services beyond the municipal boundary is not supported.
- .3 Monitor infrastructure capacity and update projections in light of new development.
- .4 Annually adjust Development Cost Charges (DCC) to reflect true costs.
- .5 New urban developments shall be fully serviced in accordance with the Subdivision and Servicing Bylaw.



- .6 Prepare amendments to the Subdivision and Servicing Bylaw to promote Smart Growth and sustainable development practices.
- .7 The City of Rossland will utilize a variety of mechanisms, including Development Cost Charges, developer contributions and capital expenditure to finance new municipal infrastructure. Prior to expending public funds for capital projects, the municipality will assess the short and long-term implications of such expenditures.
- .8 Require all new development to locate all utilities (including power, phone etc.) underground and encourage existing development to locate utilities underground where feasible.

23.3 Policies – Storm Water Management

- .1 Require developers to provide storm water management plans for all new development and redevelopment proposals. These proposals should include a program for the capture, retention and, when appropriate, on site infiltration, of storm water runoff during major storm events.
- .2 Encourage stream responsible forestry and mining practices within the City boundaries through the use of Best Management Practices.
- .3 Ensure storm water runoff during storm events is not released directly to the storm sewer system by identifying areas to

capture and hold storm water for infiltration or slow release.

- .4 Promote alternative storm water management practices in new developments where possible.
- .5 Minimise all impervious surfaces where possible.
- .6 Encourage rain water retention to use for irrigation and household washing.
- .7 Encourage grey water recycling.

23.4 Policies – Potable Water

- .1 Require new and redevelopment proposals to ensure access to City water services is available.
- .2 Water conservation will be encouraged through policies and programs including:

- Water metering;
- Requirements and incentives for low water usage fixtures (e.g. low flow shower heads and toilets); and,
- Landscaping designs with lower demands for watering.

- .3 Support education programs which encourage responsible water use and conservation technologies.
- .4 Develop a watershed management plan including the establishment of watershed boundaries and initiatives to measure flows and temperatures throughout the year.
- .5 Establish Best Management Practices for development within the watershed to



ensure all activity occurring within these areas is undertaken in an environmental sensitive manner that gives highest priority to protecting water supplies and quality.

- .5 Continue to work towards becoming a Zero Waste community.

23.5 Policies - Sewage Disposal

- .1 Require new and redevelopment proposals ensure access to City sewer services is available.
- .2 Review the existing drainage issues and identify options for resolving deficiencies. They include locating sections where storm drainage infiltrates into the sanitary sewage collection systems and leads to discharging problems into the regional sewage treatment plant in Trail.
- .3 Ensure that discharge volumes from new developments are within sewage system capacity.
- .4 Encourage water conservation practices to minimize sewer flows.

23.6 Policies - Waste Reduction

- .1 Explore the creation of a new 3R program for Rossland that will aim towards waste disposal reduction.
- .2 Explore opportunities for the implementation of a community composting site and program.
- .3 Consider tracking waste disposal for Rossland and share that information with the community so that progress and challenges can be evaluated.
- .4 Consider a fee-structured green dump site for organic yard waste.



24. Governance

Background

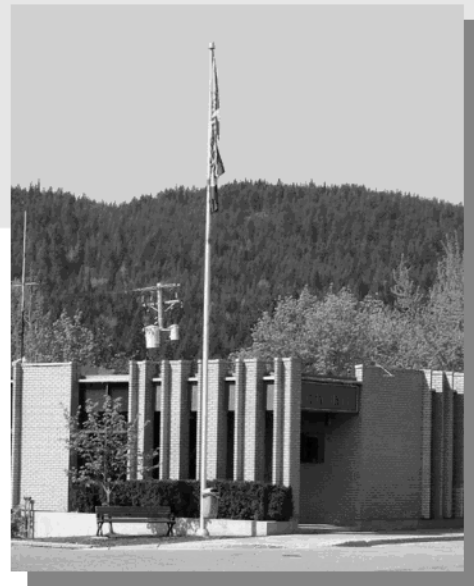
Citizens in Rossland have a history of becoming actively involved in governance issues and the town has a reputation as an innovator in direct democracy. Ensuring the governance is both democratic and engaging will provide certainty that the residents' voices are heard, and that Council's decisions are informed and supported by residents.

24.1 Objectives

- .1 To support the implementation and monitoring of the Strategic Sustainability Plan.
- .2 To provide responsive and democratic civic government to the Citizens of Rossland and nurture their sense of community by building on the accomplishments of past generations.
- .3 To strive for improved governance through the encouragement of increased public participation in community development.
- .4 To collaborate with the Regional District of Kootenay Boundary and neighbouring municipalities on regional issues.

24.2 Policy

- .1 Encourage public participation in community planning and governance.



- .2 Review the development process and identify opportunities to streamline procedures without minimising public consultation opportunities.
- .3 Establish a citizen advisory group(s) or task force(s) to assist in implementation and monitoring of the Strategic Sustainability Plan.
- .4 Consider annual program-based budgeting to support prioritised actions within the Strategic Sustainability Plan.
- .5 Ensure that residents and affected stakeholders are afforded meaningful opportunities to provide input into public planning processes.
- .6 Establish a town communications network that keeps residents informed.
- .7 Collaborate with the RDKB and neighbouring communities on regionally significant issues, including but not limited to transportation, servicing, economic development and watershed protection.



25. *Community Economic Development*

Background

Rossland exists within a larger economic unit that includes neighbouring municipalities and two regional districts, RDKB and RDCK. In 2006, approximately 37% of employed residents worked in Rossland, while almost 60% travelled to Trail for work. Large organisations such as Teck Cominco make a huge economic contribution to the sustainability of Rossland and the region. Rossland's traditional reliance on natural resource processing and regional institutions is being offset by an increasingly diverse local economy. The shift away from traditional economic mainstays has been driven by activities related to year-round tourism and the knowledge based sector.

25.1 Objectives

- .1 To provide a growth oriented, diverse and balanced economic base of quality employment and sustainable wages for residents.
- .2 To encourage a year-round tourism economy and a broad range of value-added industries.
- .3 To encourage state of the art information and communication technology systems.
- .4 To promote heritage, arts and culture as pillar industries that provide stable and diverse revenue sources.



- .5 To support the growth of a local trades and construction workforce.
- .6 To attract entrepreneurs with the knowledge, skills and resources to help establish Rossland as a hub of innovative new business.

25.2 Policy

- .1 Support protection of employment generating lands and expanding land base for employment generating uses.
- .2 Encourage a downtown and main street revitalization program.
- .3 Encourage economic diversification to increase year-round local employment opportunities.
- .4 Consider economic development models appropriate to Rossland which suggest alternative approaches for employment generation other than the current reliance on the resource industry.
- .5 Support value-added products made in Rossland.
- .6 Explore incentive programs to promote the expansion of home-based businesses.



- .7 Support activities that increase weekend business such as business fairs, expos or conferences.
- .8 Develop a Community Economic Development Strategy and participate in the creation of a Regional Economic Development Strategy.
- .9 Consider creating a plan to provide world-class telecommunications infrastructure in Rossland.



26. Resource Management

Background

Within the municipal borders of Rossland there are currently large areas of undeveloped land. These lands should be carefully considered prior to development to ensure impacts on the existing community are addressed such as the protection of the community's water supply, viewscales, agricultural opportunities and active forestry activities. The Resource Management designation will provide flexibility in considering development proposals outside the existing footprint of the City, and will hold the large undeveloped areas in protection until such time as suitable development is considered, or the City exceeds the current residential footprint.

26.1 Objectives

- .1 To ensure the existing natural areas that make up a large portion of the municipality are protected and enhanced to encourage and maintain stewardship of the lands.
- .2 To support a wide range of agricultural practices within Rossland and preserve land to build local food production capacity.
- .3 To protect significant landscape features that provide Rossland with its scenic panoramic views.



Photo: Rossland Chamber of Commerce

- .4 To limit expansion of the relatively compact settlement footprint, avoiding satellite developments, in order to preserve the peripheral greenbelt Rossland now enjoys.
- .5 To protect the natural ecosystem from disruptive invasive species.
- .6 To protect Rossland's watersheds in order to ensure a safe, adequate and reliable future supply of water.

26.2 Policies

- .1 Development should only be considered within the areas designated Resource Management Area on Schedule B – Land Use Designations, when impacts affecting protection of the community's water supply, viewscales and agricultural opportunities are carefully considered.
- .2 Consider the following policies holistically when evaluating development proposals within the Resource Management Area designation.
- .3 Consider limited small scale residential development or recreational cabins as appropriate.



Forest Resources

- .4 Encourage ecologically responsible forest practices within the City of Rossland.
- .5 Consider further mapping and protection of significant tree stands within the City boundaries.
- .6 Support forest canopy retention adjacent to riparian corridors and seasonal/ephemeral creeks.
- .7 Support ecosystem diversity within forests.

Agriculture

- .8 Consider conducting a study to identify viable agricultural lands, possibly on a regional basis, to support local agriculture and food production through preservation of agriculturally viable lands.
- .9 Support the production, processing, distribution and sale of locally grown products.
- .10 Urban agriculture is encouraged as a method to assist in providing daily food items considering other community goals such as Bear Smart initiatives.

Watershed Management

- .11 Develop a Watershed Management Plan to ensure water quality is protected over time and strategies to ensure development, recreation and resource related activities within the watershed do not impact future water supply or quality.

- .12 Ensure development, tourism and resource-related activities (i.e. logging) within the watershed are undertaken in an environmentally sensitive manner.

Viewscapes

- .13 Conduct a viewscape analysis when funding permits, to ensure future development does not impact highly valued view corridors,.
- .14 Discourage negative impacts on viewscapes due to logging and resource related extraction when reviewing such development applications.
- .15 Collaborate with the Regional District of Kootenay Boundary (RDKB) and landowners to protect viewscapes outside municipal boundaries.

Sand and Gravel Extraction

- .16 Consider sand and gravel extraction facilities provided that the activity does not detract from watershed quality, viewscapes or other natural resources/facilities within the City.
- .17 Sand and gravel extraction should take place in accordance with a long term reclamation strategy which addresses future land uses, stable long term grades and revegetation with native species where appropriate.



Energy Conservation and Generation

.18 Support the development of low impact alternative and renewable energy sources, such as wind power, micro hydro, solar, biomass or geothermal projects, subject to:

- Minimal impacts on recreational amenities;
- Limited visual impacts from all infrastructure and transmission lines;
- Minimal impacts on natural ecosystems;
- Meaningful community consultation; and
- Minimal impacts on the watershed.

.18 Where a proposed power project meets the present or future Fortis working definition of *green power*, it will be considered consistent with the Resource Management Area designation in this plan and will not require a plan amendment if Council determines that it meets this and other objectives of the Official Community Plan. Site specific rezoning applications for green energy projects will be evaluated in relation to Fortis working definition of *green power* as follows:

- Renewable – this means the resource must be replenishable by natural processes within a reasonable length of time – at the

longest, within about one average human life span;

- Environmentally responsible – this means that the project avoids any significant environmental impact;
- Socially responsible – this means that the energy is not generated in a way that conflicts with key community values; and,
- Licensable – this means that the project meets all relevant regulations and standards.

Mining

19. Collaborate and cooperate with provincial authorities to ensure appropriate mining practices are undertaken.

26.3 Resort Recreation

- .1 The following policies apply to lands designated as Resort Recreation on the attached Schedule B.
- .2 Support resort recreational activities such as golfing and skiing that protect and enhance ecosystem integrity, indigenous biodiversity and wildlife habitat.
- .3 Protect backcountry areas from overuse and degradation.
- .4 Design and manage development to protect as much of the natural environment as possible.



27. Special Planning Areas

Three special planning areas have been identified within the Official Community Plan Schedule B. These areas have been studied separately and are guided by more detailed policy contained within the subsequent schedules. The three areas are defined as the Red Mountain Resort Area, the Redstone Golf Resort Area and the Midtown Transition Area.

27.1 Red Mountain Area

- .1 The Red Mountain Area as defined by the Special Planning Boundary is further regulated by the policies defined within the Red Mountain Consolidated Base Area Sector Plan, Schedule G, in addition to the general policies contained within the Official Community Plan.
- .2 The Red Mountain Area as defined by the Special Planning Boundary is further regulated by the policies defined in Development Permit Area 2-Red Mountain Area in addition to the general policies contained within the Official Community Plan.

27.2 Redstone Golf Resort Area

- .1 The Redstone Golf Resort Area as defined by the Special Planning Boundary is further regulated by the policies defined within the Redstone Golf Resort Area Plan, Schedule I, in addition to the general policies



Photo: Troy Colautti

contained within the Official Community Plan.

- .2 The Redstone Golf Resort Area as defined by the Special Planning Boundary is further regulated by the policies defined in Development Permit Area 5-Redstone Golf Resort Area in addition to the general policies contained within the Official Community Plan.
- .3 The designations as presented on the land use map, Schedule B, are a general layout of the proposed land uses in the Redstone Golf Course Special Planning Area. The area specifics such as location, type and amount of residential/commercial will be determined during a rezoning application.

27.3 Midtown Transition Area

- .1 The Midtown Transition Area as defined by the Special Planning Boundary is further regulated by the policies defined within the Midtown Transition Area Neighbourhood Plan, Schedule J, in addition to the general policies contained within the Official Community Plan.



- .2 The designations as presented on the land use map, Schedule B, are a general layout of the proposed land uses in the Midtown Transition Special Planning Area. The area specifics such as location, type and amount of residential/commercial will be determined during a rezoning application.



PART VI: IMPLEMENTATION, MONITORING, AND REVIEW



28. Implementation

Background

The effectiveness of an Official Community Plan is dependent on the ability of the community to implement the plan. There are a variety of ways that the OCP can be put into action, including municipal programs and projects, corporate funding, partnerships and grants and regulatory mechanisms such as the Zoning Bylaw. Directions and decisions made by Council shape how the OCP is implemented.

28.1 Policies

It is anticipated that the OCP will be implemented through:

- .1 Comprehensive review of the Zoning Bylaw, Building Bylaw and Subdivision and Servicing Bylaw to ensure all land use regulations conform with the OCP;
- .2 Updating the Capital Expenditure Program to identify funding priorities for infrastructure upgrades consistent with the OCP;
- .3 Reviewing and updating the Development Cost Charge Bylaw;
- .4 Allocating funding in the annual budget for projects consistent with the policies in the OCP wherever possible;



- .5 Ensuring land use changes conform to the land use designations and policies contained within the OCP and Development Permit Areas; and
- .6 Work with the RDKB to ensure regional planning policies are consistent with the Official Community Plan.



29. Monitoring



Background

Monitoring allows the community to track the effectiveness of the OCP policies and make adjustments where necessary, to meet changing needs within the community.

Official Community Plan on the basis of the Triple Bottom Line: environmental, social, and economic parameters.

29.2 Policies

- .1 The City of Rossland will work towards implementing a monitoring program within two years of the adoption of this OCP. As part of this monitoring program, indicators may be identified to monitor the OCP and SSP objectives and Rossland's progress.
- .2 Monitoring refers to two specific activities;
 - Monitoring demographic changes and development activities and other trends in the City of Rossland and surrounding area; and
 - Tracking and assessing whether the policies of the Official Community Plan have been successful in helping achieve the community's vision and objectives outlined in the Strategic Sustainability Plan and the OCP.
3. The City shall measure its performance in achieving the goals and objectives of both the Strategic Sustainability Plan and the



30. Review

Changes to the OCP may be required in response to unanticipated external forces, changes in trends or community priorities. Where such changes are consistent with the Community Vision and Guiding Principles, outlined by the Strategic Sustainability Plan, Council may approve an amendment to the OCP.

Where the proposed changes are substantial or are inconsistent with the community Vision or guiding Principles, Council may undertake a comprehensive review and update of the Official Community Plan. Council shall encourage public participation during the update process.

Where no substantial changes are triggered, a comprehensive review and update of the Official Community Plan will nonetheless be initiated every 5 years.



Photo: Benjamin Leversedge



PART VI: DEVELOPMENT PERMIT AREAS



31. Background and Exemptions

Sections 919.1 and 920 of the *Local Government Act* authorize the establishment of Development Permit Areas in which a development permit must be issued by Council prior to the subdivision of land, the construction or alteration of a structure or the alteration of land. In order for this to occur, the objectives that justify the designation of Development Permit Areas and the guidelines that will enable the objectives to be achieved must be established in the Official Community Plan.

The creation of Development Permit Areas is intended to give greater control over the form and character of developments in the affected areas, beyond the provisions of the Zoning Bylaw and the Subdivision Bylaw. Development Permit Areas may also be designated for the protection of the natural environment, its ecosystems and biological diversity and protection of development from hazardous conditions. A development permit can also vary the regulations of a bylaw where it can be shown that the public interest will benefit from the resulting modifications. This, however, does not apply to the allowable use or density of the land or any flood-proofing requirement.

Exemptions

A development permit will not be required for the following uses within a Development Permit Area:

- Construction within a building including interior renovations;
- Replacement of a roof with the same or similar style and building materials;
- Underground service connections;
- addition of (HVAC) rooftop equipment; and
- Utility buildings (i.e. pump stations, electrical and telephone kiosks) not exceeding an area of 40 m².



32. Development Permit Area 1: Downtown Core, Mixed Use and Residential

Designation

The Downtown Core, Mixed Use and Residential Development Permit Area are established to regulate the form and character of commercial or multi-family residential development in the core of Rossland.

Location

The areas designated as Downtown Core, Mixed Use and Residential combine to form Development Permit Area 1 (DPA1), and are depicted on Map 1.

The Downtown Core, Mixed Use and Residential Development Permit Area include the existing central business district as well as the land that should logically provide for the expansion of the downtown commercial core, future infill and residential densification.

32.1 Objectives

The objectives of Development Permit Area 1 are to:

- .1 Ensure Rossland's commercial core remains the focal point of the community;



- .2 Ensure the small town character and heritage of Rossland is maintained; and
- .3 Ensure multi-family and mixed use development fits the scale, character and context of existing neighbourhoods.

32.2 Guidelines

- .1 The area designated as Downtown Core and Mixed Use development must be consistent with the Design Guidelines for Downtown Rossland forming Schedule E of this Bylaw.
- .2 For the lands within the Midtown Transition Special Planning Area, shown on Schedule B, development must be consistent with guidelines in the Midtown Transition Area Neighbourhood Plan forming Schedule J of this Bylaw.
- .3 The area designated as Residential in Schedule B must be consistent with the Multiple Family Design Guidelines forming Schedule K of this Bylaw.



33. Development Permit Area 2: Red Mountain

Designation

The Red Mountain Development Permit Area is established for the protection of the natural environment, its ecosystems and biological diversity; protection of development from hazardous conditions; and to regulate the form and character of development in the Red Mountain Resort Area.

Location

The area shown on Map 2 forms the Red Mountain Development Permit Area.

Definitions

Ephemeral Stream – a watercourse that has well-defined, continuous channels but flows for only part of the year, typically the spring, early summer and autumn in the interior of British Columbia.

Fish – means all life stages of salmonids, game fish, and regionally significant fish

Fish bearing stream – means a stream in which fish are present or potentially present if introduced barriers or obstructions are either removed or made passable for fish.

Residential, commercial and industrial development – means any of the following



Photo: David Dudeck

associated with or resulting from the local government regulation or approval of residential, commercial or industrial activities or ancillary activities to the extent that they are subject to local government powers under Part 26 of the *Local Government Act*:

- Removal, alteration, disruption or destruction of vegetation;
- Disturbance of soils;
- Construction or erection of buildings and structures;
- Creation of nonstructural impervious or semi-impervious surfaces;
- Flood protection works;
- Construction of roads, trails, docks, wharves and bridges;
- Provision and maintenance of sewer and water services;
- Development of drainage systems;
- Development of utility corridors; and
- Subdivision as defined in section 872 of the *Local Government Act*.

Permanent stream – means a stream that typically contains continuous surface waters or



flows for a period more than 6 months in duration.

Riparian Reserve Zone (RRZ)/Leave strip – means a setback area established on both sides of a stream, immediately adjacent to the stream, that is comprised of the protected natural feature and its riparian (leave strip) area (Figure 1). The riparian reserve zone is to remain in a largely undisturbed state, and is established to conserve and maintain the productivity of aquatic and riparian ecosystems (100% native vegetation retention). The setback area will be determined based on an environmental review.

Steep Sloped Areas – means lands in their natural state that have a slope angle of 30 % or greater for a minimum horizontal distance of ten metres.

Top-of-bank – The point closest to the boundary of the active floodplain of a stream where a break in the slope of the land occurs such that the grade beyond the break is flatter than 3:1 at any point for a minimum distance of 15 metres measured perpendicularly from the break (Figure 2).

For a floodplain area not contained in a ravine, the edge of the active floodplain of a stream where the slope of the land beyond the edge is flatter than 3:1 at any point for a minimum distance of 15 metres measured perpendicularly from the edge (Figure 2).

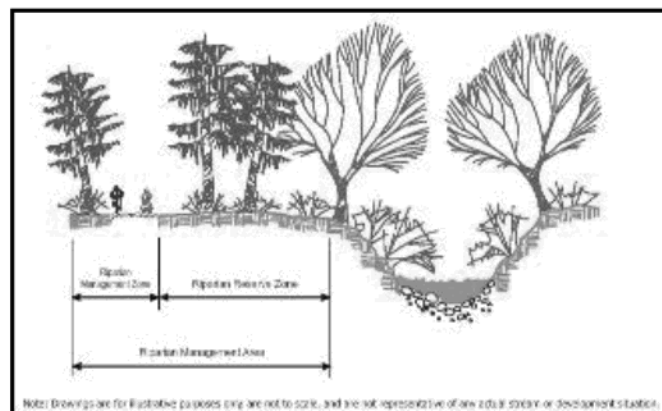


Figure 1: Riparian Reserve Zone

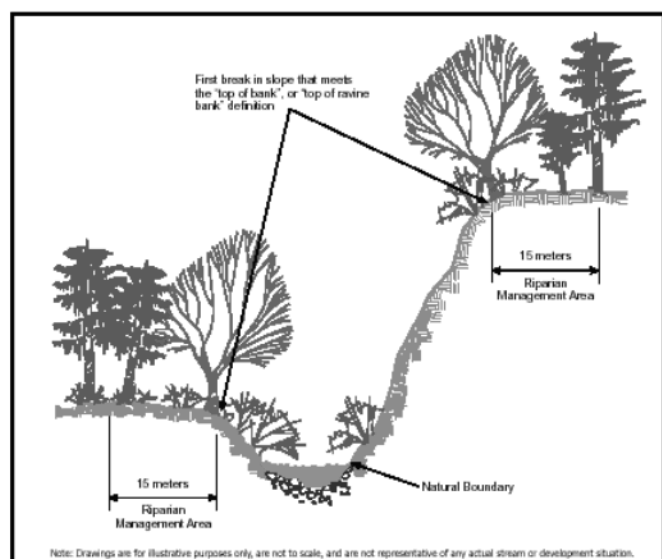


Figure 2: Top of Bank

Watershed – means all of the water and all of the land that drains into a common catchment area.

Wetland – means land that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal conditions that supports



vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, fens, estuaries and similar areas that are not part of the active floodplain of a stream.

33.1 Objectives

The objectives for Development Permit Area 2 are:

- .1 The protection of development from hazardous conditions associated with past mining conditions including the area's soil conditions and sub-surface structure.
- .2 To ensure that the form and character of the Red Mountain Resort reflects the area's unique qualities and natural setting.
- .3 To ensure that the Red Mountain ski area does not evolve as a separate entity from the City of Rossland or as a self contained resort while maintaining the resort as a key component of the larger tourism destination of Rossland.
- .4 To create a compact pedestrian-oriented village core where activities taking place within buildings are strategically located to ensure optimal interaction with outdoor activity areas and maximum solar exposure. The location of restaurants, bars and lounges is of particular importance. To work towards this vision, the Red Mountain Development Permit Area establishes guidelines to direct the siting of such uses.
- .5 To protect and preserve the watersheds and potable water intake serving the City.
- .6 To protect fish habitat and riparian ecosystems by mitigation techniques including but not limited to tree canopy retention, creek bed preservation, restriction of pervious surfaces, soft swale drainage systems, on-site percolation and filtration of development sites to prevent of siltation into adjacent creeks.
- .7 To protect environmentally sensitive areas from impacts associated with development.
- .8 To protect the development from hazards associated with steep slopes with grades over 30%.

33.2 Form and Character Guidelines

- .1 All commercial and multi-family development must be consistent with the Red Mountain Design Guidelines. (Schedule H).

33.3 Hazardous Conditions Guidelines

- .1 In areas subject to past mining activities, the City may require a certified report completed by a registered member of the Association of Professional Engineers and Geoscientists of British Columbia regarding the suitability of the site for the intended use. This individual must be competent in the field of geosciences, soil mechanics and sub-surface investigations. Where the engineer's report determines that the land may be used safely subject to conditions set out in the report, those conditions shall be set out in the Development Permit, and



upon completion of the building or structure, the owner shall provide the City with a statement certified by a professional engineer that the construction was carried out in compliance with the conditions specified in the Development Permit.

33.4 Environmental Protection Guidelines

- .1 The developer must ensure that any application affecting environmentally sensitive areas shall be reviewed in consultation with the City of Rossland, as well as federal and provincial government agencies including the British Columbia Ministry of Environment and Fisheries and Oceans Canada (DFO) where applicable.
- .2 The City of Rossland will, in accordance with the Streamside Protection Policy Directives pursuant to the Fish Protection Act or as otherwise provided by federal and provincial government agencies, impose riparian reserve zone setbacks from all watercourses as identified.
- .3 No building, structure or paving shall be constructed, reconstructed, moved or extended, nor shall any mobile home or unit, modular home or structure be located within:
 - a. A riparian reserve zone which extends 15 m from the top of bank on both sides of the watercourse for all lands with slopes less than 30% unless otherwise indicated by federal or provincial

government agencies or the City of Rossland;

- b. A riparian reserve zone which may extend a distance that is greater than 15 metres on both sides of the watercourse for all lands with steep slope areas (>30%) as determined by the City of Rossland.
 - c. A 7.5 metre riparian reserve zone setback on either side of ephemeral streams unless otherwise indicated by federal or provincial government agencies.
 - d. 30 metres of either edge of Topping Creek. Ski lift towers and ski operations' accessory buildings and structures (i.e. lift shacks), not including mechanical repair facilities, may appear within the 30-metre setback but only in compliance with provincial and federal regulations.
- .4 Riparian reserve zone setbacks will be staked and determined by a qualified registered professional (e.g. RPBio).
 - .5 Best Management Practices for hillside development must be incorporated in all hillside development to ensure that the form and character of development within environmentally sensitive steep slope areas remains appropriate for hillside development and that development on slopes that are subject to hazardous conditions are avoided or the hazards are appropriately mitigated.



.6 The City of Rossland may also impose Land Development Guidelines for the Protection of Aquatic Habitat prepared by the BC Ministry of Environment, and Fisheries and Oceans Canada (DFO) on any land development project proposed within the Natural Environment and Ecological Sustainability Development Permit Area.

.7 The riparian reserve zone within the stream protection corridor shall be permanently protected under one or more of the following:

- a. Dedication as park
- b. By return of land to the Provincial Crown in the name of the local government
- c. Rezoned as a protected area or reserve status
- d. Secured with restrictive covenants
- e. Registration as a statutory right-of-way
- f. Identified as a building setback area

.8 Development activities that will require vegetation clearing shall be limited only to those areas that require levelling, including each unit location, roadways and driveway and shall be done in accordance to Best Management Practices as determined by the City of Rossland.

.9 The developer will ensure that all disturbed areas are reclaimed and that a comprehensive landscape reclamation report is prepared by a qualified registered professional (e.g. RPBio, PAg, BCSLA/CSLA) that describes the manner in which

disturbed areas will be reclaimed, including:

- a. The retention of natural vegetation is strongly encouraged wherever possible
- b. Reclamation activities will include naturalized landscape and replanting of native vegetation wherever possible
- c. A tree replacement plan will be developed complete with security for replanting
- d. Snow clearing activities and the location of snow storage areas must be developed to ensure that vegetation is not destroyed

.10 Grading on any site will be conducted to meet the following conditions:

- a. Watercourses must not be impacted
- b. Best Management Practices for Hillside development must be incorporated
- c. The developer must ensure that all construction debris shall be removed from the site. The City of Rossland may also impose their Subdivision Servicing Bylaw to address construction, stream sedimentation, creek crossings, erosion etc.
- d. The developer must ensure that the potential for erosion is mitigated both during construction and after construction is completed
- e. The City will impose a Soil Removal and Deposit Bylaw to address erosion control issues



- .11 Development will be directed to appropriate areas with slopes averaging less than 30%. Where it can be demonstrated that the proposed development will be sensitively integrated with the natural environment and will present no hazards to person or property, development may be permitted on land with a natural slope which averages greater than 30%. Natural vegetation should be retained on slopes in order to control potential erosion, land slip and rock falls.
- .12 Development on or near steep hillsides may require that buildings and structures be set back a given distance as specified in the Development Permit from the top or the toe of the slope.
- .13 For developments in areas where the City considers that the land is subject or may be subject to erosion, land slip, rock falls or subsidence, the City may require a certified report completed by a registered member of the Association of Professional Engineers and Geoscientists of British Columbia regarding the suitability of the site for the intended use. This individual must be competent in the field of geosciences, soil mechanics and sub-surface investigations. Where the engineer's report determines that the land may be used safely subject to conditions set out in the report, those conditions shall be set out in the Development Permit, and upon completion of the building or structure, the owner shall provide the City with a statement certified by a professional engineer that the construction was carried out in compliance with the conditions specified in the Development Permit.
- .14 Clustered units shall be stepped to follow the natural slope of the hill.
- .15 Where a development proposal is situated within an environmentally sensitive area, an environmental review prepared by a qualified registered professional (e.g. RPBio, PAg, BCSLA/CSLA) will be required. The requirement for an environmental review can be waived where the applicant, City government staff and federal and provincial government agencies agree that development impacts will be negligible.
- .16 For development within the riparian reserve zone, environmental mitigation and restoration will be a requirement of the development process, and mitigation and compensation measures must be acceptable and authorized by federal and provincial government agencies.
- .17 To minimize urban runoff impacts on the water system, swales and open ditches are to be used, rather than curb and gutter systems.
- .18 The storm drainage system will be constructed in a manner that diverts drainage away from watercourses and wetlands. Appropriate technology (e.g. stormceptors) and best management practices will be implemented throughout



the development to capture contaminants such as suspended sediments and oils.

- .19 The development of roadways, sidewalks and driveways must be designed to minimize imperviousness, and porous surfaces will be used wherever possible.
- .20 Wood decking, bricks or interlocking stones should be used in walkways instead of impervious materials within the development to increase infiltration.
- .21 Park pathways and connecting access will be designed to maximize access by all age groups and varying levels of mobility and should include the following:
 - a. The trail is for pedestrian use only
 - b. The trail is designed for pedestrian use but should accommodate wheel chair access and seniors electric carts
 - c. No trees will be removed
 - d. The trail's surface allows water to filter through
 - e. The overall slope of the trail is less than 10%; where portions are greater than 10%, the trail must be designed to prevent erosion
- .22 Snow removal and storage areas must be designed and located to avoid any adverse impacts to the watershed.
- .23 The design and construction of any stream crossing must be conducted in a manner that avoids any adverse impact to the watershed including fish and fish habitat.
- .24 Resident and visitor parking within the development will only occur within

designated parking areas as prescribed by the City of Rossland's Zoning Bylaw.

- .25 All development within this Development Permit Area shall adhere to best management practices established by the Topping Creek Best Management Practices, Schedule F.



34. Development Permit Area 3: Trail Creek Area



Designation

The Trail Creek Development Permit Area is established for the protection of the natural environment, its ecosystems and biological diversity and for the protection of development from hazardous conditions in the Trail Creek Area.

Location

The area within 30 metres from Trail Creek is in this Development Permit and is generally shown on Map 3.

34.1 Objectives

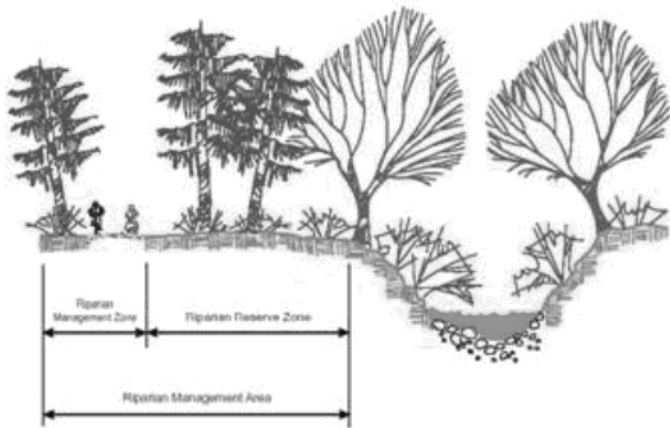
The objectives for Development Permit Area 3 are:

- .1 To protect areas that are subject to periodic flooding and as such, special precautions need to be taken regarding any potential development of these lands.
- .2 To protect fish habitat and riparian ecosystems.
- .3 To protect Trail Creek from impacts associated with development.
- .4 To provide an opportunity to create a linear park from Centennial Park to the Redstone Golf Course.

34.2 Guidelines

- .1 The developer must ensure that any application within environmentally sensitive areas is reviewed in consultation with the City of Rossland, as well as federal and provincial government agencies including the BC Ministry of Environment, and Fisheries and Oceans Canada (DFO) where applicable.
- .2 The City of Rossland will, in accordance with the Land Development Guidelines for the Protection of Aquatic Habitat and to comply with Section 35(1) of the *Fisheries Act* shall impose a 15 metre riparian reserve zone setback on Trail Creek unless otherwise specified by a qualified registered professional (e.g. RPBio, PAg, BCSLA/CSLA). The professional must demonstrate reasoning that supports reducing or increasing the riparian reserve zone.





Note: Drawings are for illustrative purposes only, are not to scale, and are not representative of any actual stream or development situation.

FIGURE 1: Riparian Reserve Zone

- .3 Riparian reserve zone setbacks will be staked and determined by a qualified registered professional (e.g. RPBio).
- .4 The City of Rossland may also impose the Land Development Guidelines for the Protection of Aquatic Habitat prepared by the BC Ministry of Water, Lands and Air Protection and Fisheries and Oceans Canada (DFO) on any land development project proposed within the Trail Creek Development Permit Area.
- .5 The riparian reserve zone within the stream protection corridor shall be permanently protected under one or more of the following:
 - a. Dedication as park
 - b. By return of land to the Provincial Crown in the name of the local government
 - c. Rezoned as a protected area or reserve status

- d. Secured with restrictive covenants
 - e. Registration as a statutory right-of-way
 - f. Identified as a building setback area
- .6 Grading on any site will be conducted to meet the following conditions:
 - a. Watercourses must not be impacted
 - b. Drainage is effectively and properly removed from the site
- .7 The developer must ensure that all construction debris shall be removed from the site. The City of Rossland may also impose their Subdivision Servicing Bylaw to address construction, stream sedimentation, creek crossings, erosion etc.
- .8 For development within the riparian reserve zone, environmental mitigation and restoration will be a requirement of the development process.
- .9 The developer must ensure that the potential for erosion is mitigated both during construction and after construction is completed.
- .10 Development will be directed to appropriate areas with slopes averaging less than 30%. Where it can be demonstrated that the proposed development will be sensitively integrated with the natural environment and will present no hazards to person or property, development *may* be permitted on land with a natural slope which averages greater than 30%. Natural vegetation



should be retained on slopes in order to control potential erosion, land slip and rock falls.

- .11 To minimize urban runoff impacts on the water system, swales and open ditches are to be used, rather than curb and gutter systems.
- .12 The design and construction of any stream crossing must be conducted in a manner that avoids any adverse impact to the watershed including fish and fish habitat.
- .13 Laneways should be reclaimed by the City.
- .14 Culverting Trail Creek shall be avoided.



35. Development Permit Area 4: Gateway Commercial

Designation

The Gateway Commercial Development Permit Area is established to regulate the form and character of commercial development at the prominent west gateway to Rossland and for gateways into the City of Rossland which may be developed over time.

Location

The area designated as Gateway Commercial forms Development Permit Area 4, as shown on Map 4.

35.1 Objectives

The objectives for Development Permit Area 4 are:

- .1 Ensure the development within the area establishes a sense of entry and projects a positive visual image as travelers enter Rossland.
- .2 Ensure vehicular access for development is provided in a manner that is safe and convenient
- .3 Prevent strip type retail from occurring along the highway.



35.2 Guidelines

- .1 Site Access - the Development Permit will require that provisions for access to the site be approved by the Ministry of Transportation and Highways in compliance with good highway engineering practices. Individual, direct access from each parcel to the highway is generally discouraged. Shared entry points or access via a frontage road is preferred.
- .2 Signage and Lighting - in the Development Permit, Council may include measures to ensure that the size, siting, and style of signage and lighting are not obtrusive or present a cluttered image. It is Council's intention that signage and lighting be used as positive elements to enhance the overall appearance of the development.
- .3 Parking and Driveway Accesses - to achieve a high standard of development, the Development Permit may require that all parking areas and driveway accesses be paved and that specific points of access and egress be provided.
- .4 Screening and Landscaping - in the Development Permit, Council may require that service and outdoor storage areas be screened from public view by appropriate



fencing or landscaping, and that areas of the site not occupied by structures, parking areas, access roads or service areas be appropriately landscaped.



36. Development Permit Area 5: Redstone Golf Course Resort Area

Designation

The Redstone Golf Resort Area Development Permit Area is established for the protection of the natural environment, its ecosystems and biological diversity; protection of development from hazardous conditions; and to regulate the form and character of development in the Redstone Golf Resort Area.

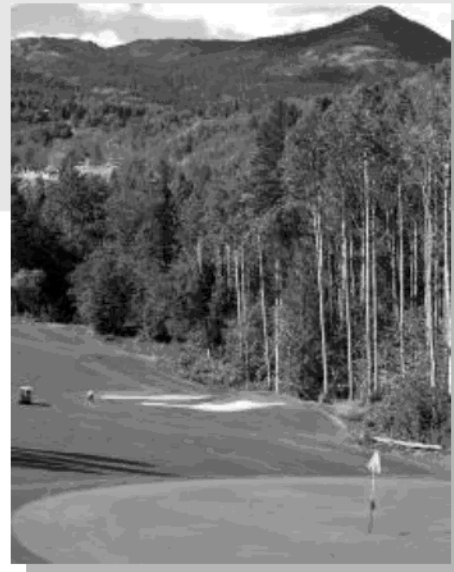
Location

The area shown on Map 5 forms the Redstone Golf Resort Area.

36.1 Objectives

The objectives for Development Permit Area 5 are:

- .1 The protection of development from hazardous conditions associated with past mining activity including the area's soil conditions and sub-surface structure.
- .2 To ensure that the inter-relationship between residential, commercial, golf course recreation and open space achieves appropriate balance and harmony between built form and natural environments and to ensure the functional requirements of the various uses are not



compromised and compatible uses are fully addressed.

- .3 To ensure that the Redstone Golf Course Area does not evolve as a separate entity from the City of Rossland or as a self contained resort while maintaining the resort as a key component of the larger tourism destination of Rossland.
- .4 To protect fish habitat and riparian ecosystems.
- .5 To protect environmentally sensitive areas from impacts associated with development.
- .6 To protect the development from hazards associated with steep slopes with grades over 30%.

36.2 Form and Character Guidelines

1. The design, siting and height of all buildings and structures shall respect the adjacent natural features in consideration of scale in order that development remains visually and physically integrated. Natural ecosystems and vegetation should be



- maintained to the greatest extent possible outside of designated building envelopes.
2. Modification to existing contours should be minimized to the greatest extent possible through innovative and slope adaptive architectural design. Scarred or disturbed areas resulting from construction activity must be re-vegetated so as to create a suitable transition with surrounding natural conditions. Indigenous plant species shall be employed as much as possible in the landscape treatments associated with commercial and multi-family residential developments.
 3. The development of commercial and multi-family residential uses shall maximize relationships to open space and related recreational uses. The maximum site area possible must be devoted to landscaped and natural preservation areas.
 4. Building forms should take advantage of views, permit snow accumulation to be handled in a safe manner, provide a varied built environment in accordance with the Redstone Golf Course Resort Design Guidelines and respect aesthetic considerations of adjacent development.
 5. Architectural design must employ strategies that will reduce the overall impact of building massing. This may include variations in roofline and floor levels through use of stepped configurations, and articulation and modulation of exterior building facades.
 6. Multiple family residential developments should be oriented to allow maximum sun penetration and to provide for outdoor recreation areas. Visual privacy between units should be provided for and may be obtained by separating buildings with screening, by separating outdoor areas by articulating the building plan or by situating units to take advantage of the natural contours of the site.
 7. Exterior lighting should be low level and should avoid “hot spots” and contrasting shadow areas. Walkways and streets should be adequately lit to provide for safe movement of pedestrians, bicyclists, vehicles and other users.
 8. Signage should be visible and easily read. Signage should compliment, not contrast, with the architectural features and finishes of the building or development enclave they are associated with.
 9. Adequate waste management infrastructure must be provided and input in this regard must be requested from the Regional Resource Recovery Coordinator’s office.
 10. In order to provide for the protection of, and access to, natural features in the Redstone Golf Course Resort, the City of Rossland may accept or request the granting of public trails over lands which are the subject of subdivision application.
 11. Adequate emergency vehicle access must be provided and input in this regard must



be requested from the Regional Fire Chief's office.

36.3 Environmental protection

1. All development within this Development Permit area is subject to the recommendations in the Redstone Golf Course Resort Golf Course Expansion and Residential Development Preliminary Screening Environmental Assessment prepared by Masse and Miller and dated June 2005.
2. The Golf Course Development and Management Plan will be adhered to. This document addresses the impacts relating to golf course development and management on Trail Creek. It includes: a Storm Water Management Plan, an Irrigation Management Plan, an Integrated Pest Management Plan and a Maintenance Area Management Plan.
3. The Best Management Practices for Species at Risk prepared by Masse and Miller dated June 2005 should be adhered to.
4. An environmental monitor should ensure that the Best Management Practices and Erosion and Sediment Control Plan are correctly implemented and that mitigative measures are adequate.

36.4 Hazardous Conditions Guidelines

- .1 In areas subject to past mining activities, the City may require a certified report completed by a registered member of the Association of Professional Engineers and

Geoscientists of British Columbia regarding the suitability of the site for the intended use. This individual must be competent in the field of geosciences, soil mechanics and sub-surface investigations. Where the engineer's report determines that the land may be used safely subject to conditions set out in the report, those conditions shall be set out in the Development Permit, and upon completion of the building or structure, the owner shall provide the City with a statement certified by a professional engineer that the construction was carried out in compliance with the conditions specified in the Development Permit.

- .2 Best Management Guidelines for Steep Slopes will include building siting, environmental degradation, roads, lot coverage, landscaping, tree and ground cover protection, retaining walls and grading on steep sloped lands and the form and character of buildings in harmony with hillside and steep slope sites.



37. Development Permit Area Maps



PART VIII: SCHEDULES

