DISTRICT OF SQUAMISH

# Innovation Roadmap

DRAFT

INNOVATION WORKING GROUP 10-3-2023

# Acknowledgement

Squamish is located on the unceded, ancestral, and traditional territories of the Skwxwú7mesh (Squamish) peoples who have cared for and protected the land since time immemorial; a place where we are privileged and grateful to live, work, and play.

We recognize the opportunity to learn from and work with Indigenous peoples, nations, and entrepreneurs as right holders and economic partners in Squamish and beyond. Our commitment extends to actively decolonize and indigenize our economic practices, to work toward meeting the recommendations of the Truth and Reconciliation Commission 94 calls to action, and to honour the United Nations Rights of Indigenous People. We recognize this journey will require us to unlearn, relearn, and be willing to grow and imagine other ways of being.

# Contents

Acknow	/ledgement	1
Squami	sh, an innovation ecosystem	3
Innovat	ion roadmap development process	4
Innovat	ion Working Group	5
Why inr	novation and why now?	6
The Dist	trict Squamish, innovation context	7
Linkage	to other plans and initiatives	g
Building	g innovation ecosystems, best practices	10
Climate	Change and Innovation in Squamish	12
Case stu	udies in innovation	13
Squami	sh's innovation ecosystem today	15
Outcom	nes, Key Actions, and Strategic Recommendations	16
Propose	ed Implementation Timeline:	22
Append	lix	23
1. Innov	ation Ecosystem Case Studies	24
1.	Boulder, Colorado	24
2.	Aarhus, Denmark	26
3.	Waterloo, Canada	29
2 Decis	ion-Making Matrix	31

# Squamish, an innovation ecosystem

In the heart of Coastal British Columbia's stunning Sea to Sky Corridor, Squamish is nestled within one of Canada's most breathtaking regions. This vibrant community embodies the spirit of exploration, collaboration, entrepreneurship, and innovation, earning itself a reputation as one of Canada's foremost entrepreneurial hubs. Squamish's allure rests in its attractive active-outdoor lifestyle, drawing a diverse and knowledgeable talent pool. Here, individuals fearlessly push boundaries while cherishing the value of collaboration and knowledge exchange.

Just 45 minutes from Vancouver, a major urban centre, Squamish is a thriving, sustainable adventure-tourism destination, a creative design hub and a real-world testing ground for the outdoor recreation industry. Its expanding network of green economy companies spearheads sustainable solutions to complex global challenges. Despite its remarkable accomplishments, Squamish maintains its small-town charm and close-knit community vibe while fostering world-class creativity and innovation.

Squamish offers an unparalleled quality of life, a vibrant local culture, and an unwavering commitment to sustainability, making it an idyllic haven for like-minded entrepreneurs and businesses. This exceptional setting sets a dynamic environment where groundbreaking ideas can flourish and leave an indelible impact.

# Innovation roadmap development process

The Innovation Working Group, formed in late 2022, comprises members from the District's Economic Leadership Team and Economic Partner Forum with additional representatives from the local industry. The group was established to help develop and guide the District's innovation work. From the outset, the Group recognized the importance of defining the role of innovation in shaping Squamish and the region's economy, thereby establishing the mandate for the Innovation Working Group.

### **Innovation Working Group Mandate:**

We are stewards of the Squamish Innovation Roadmap.

Our mission is to foster a thriving culture of entrepreneurship and sustainability. We continuously adapt and respond to the evolving needs of regional innovation, positioning the Sea to Sky Corridor as a dynamic innovation ecosystem. By forging connections with networks and leveraging available resources, we foster ideation, encourage innovative solutions, and advocate to eliminate barriers to the growth and development of our regional innovation ecosystem.

In May 2023, the Innovation Working Group participated in a strategy session led by Ideas for Impact to provide insight into Squamish's distinctive opportunity as an innovation ecosystem. This Roadmap document was developed as a direct result of the session, exploratory meetings with the community, regular meetings with the Innovation Working Group, and tours of successful innovation hubs in the province.

The Roadmap offers a comprehensive summary of the findings from engagement and draws on best practices from other innovation ecosystems, and is meant to inform the District of Squamish, partner organizations, and other levels of government, in building Squamish's innovation ecosystem.

FIGURE 1: INNOVATION ROADMAP DEVELOPMENT PROCESS

Emerging Sector Roadmap - Innovation Needs	Innovation Working Group Formation		Innovation Strategy Session		Innovation Roadmap		Roadmap Refinement/ Updates	
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# Innovation Working Group



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# Why innovation and why now?

Innovation is critical to every aspect of our district, from community well-being to economic prosperity. If we don't embrace innovation, we miss opportunities to foster solutions to today's most pressing challenges. We know that innovation brings a community together. It tackles major challenges, attracts talent and investment, and leads to the development of more innovative solutions. Innovation as a foundational principle our community, can be used to plan, strategize, and guide decision-making for opportunities large and small.

Squamish has one of the highest numbers of entrepreneurs per capita in Canada.¹ The people here value exploration, problem-solving, and making the world a better place. Whether tackling challenges during expeditions or addressing societal issues, this mindset is deeply ingrained in Squamish and the greater Sea to Sky corridor. Providing access to tools and a supportive community is essential for solving the major problems we face as a society. The Roadmap democratizes entrepreneurship by making innovation accessible to everyone in our community and creating community spaces where makers and creators can come together. This approach aligns with the circular economy philosophy, allowing us to minimize duplication of resources, encourage collaboration, build a sense of community, and reduce our overall environmental impact.

Innovation is needed globally because it drives progress and enables us to overcome challenges. Simultaneously, innovation thrives on the collaboration of diverse individuals and dynamic environments, fostering the exploration of new ideas and instigating transformative change. It involves developing new ideas, methods, and technologies to improve our lives. Innovation offers solutions to problems, creates new opportunities, and enhances our quality of life. It fuels advancements in healthcare, technology, sustainability, and more. The Roadmap aims to create space for people to innovate, encouraging the exploration of creative solutions, fostering economic growth, and promoting positive change in society. Innovation is about thinking outside the box, pushing boundaries, and finding better ways of doing things.

<sup>&</sup>lt;sup>1</sup> Microsoft Word - Entrepreneurial Communities-2018-E-final (cfib-fcei.ca)

# The District Squamish, innovation context

In 2020, the District endorsed a sector ecosystem consisting of Core and Enabling Sectors and Emerging Areas in the local economy. Core and Enabling sectors encompass those with many local firms and employment opportunities or that are key in supporting other areas of our emerging economy, including tourism, forestry, wood products, transportation, education, creative industries, and high technology. On the other hand, the Emerging Areas, namely Squamish's Green and Outdoor Recreation Economies, are emerging sectors that align well with the region's unique strengths. These sectors demonstrate strong potential for generating trade and investment, aligning with provincial and federal priorities, and supporting community goals regarding sustainability and well-being. The Green Economy comprises Clean Technologies and Environmental Services, Innovative Construction, Forestry and Wood Products, and Agrifoods. The Outdoor Recreation sectors include Recreational Technology and Performance Apparel Design and Adventure-based Media, Marketing, and Film.

To enhance the diversification and resilience of Squamish's economy, the District completed the <a href="Emerging Sector Roadmap and Action Plan">Emerging Sector Roadmap and Action Plan</a> in 2021. This comprehensive plan serves as a guide for developing the two Emerging Areas. It identifies several actions to accomplish two primary objectives: establish a solid foundation for emerging sector development and attract investment and trade opportunities. Through an inclusive engagement process involving industry, supporting organizations, government entities, and academia, it became evident that fostering local innovation was a crucial element in building this foundation. Consequently, the District established the Innovation Working Group, which is dedicated to driving local innovation forward.

Figure 2 provides an overview of the key outputs of the Emerging Sector Roadmap and Action Plan. The development of a circular economy and innovation ecosystem were identified as the top two areas for further exploration. Following the outputs of the exercise, circular economy has become a major focus of research and action for the District. Key recent actions include participation in the Circular Cities and Regions Initiative, and the development of an Embodied Emissions Guide.

### FIGURE 2 SQUAMISH INNOVATION CONTEXT





# Identified Key Areas for Exploration

Project	Description			
Development of a circular economy	The development of a circular economy refers to a systematic process that is regenerative by design and aims to gradually decouple growth from the consumption of finite resources. The circular economy is based on three principles:			
	Design out waste and pollution			
	Keep products and materials in use			
	Regenerate natural systems			
Shared training, innovation, development and mentorship space	Shared innovation and training space is described as a centralized and shared concept for learning, innovation, and the development and scaling of business concepts.			

# Linkage to other plans and initiatives

By no means is innovation in the Sea to Sky region reliant on an Innovation Roadmap. Innovation abounds in Squamish and throughout the region. Every day, new products and services, and community solutions are being developed by passionate entrepreneurs and community members alike. The purpose of the Innovation Roadmap is to better coordinate and formalize efforts related to innovation, providing a lens to prioritize initiatives, in consideration of the recommendations articulated within the Roadmap.

The Roadmap leverages relevant and existing District and broader regional, provincial, and national goals to better activate the region's innovation ecosystem.

The principles of innovation align with the District's values, in particular, the values of collaboration and progress. The District's Strategic Plan and Official Community Plan 2018 (OCP), 2020 Community Climate Action Plan (CCAP) (see Climate Change and Innovation in Squamish section), 2022 Zero Waste Action Plan (ZWAP), 2021 Emerging Sector Roadmap and Action Plan, and Draft 2023 Circular Economy Roadmap and Implementation Plan, all demonstrate clear alignment to Innovation Roadmap outcomes, actions, and recommendations.

Figure 3 demonstrates how the District, and regional organizations are leading initiatives that are creating the foundation for the innovation ecosystem. From regional collaborations in agri-foods to create new local supply-chains, distribution channels, and products, to working to establish an innovation centre and regional network to propel the development of recreational technology gear and apparel, and related media industries, to delivering industry-relevant education and training for the corridor, there is no shortage of momentum.

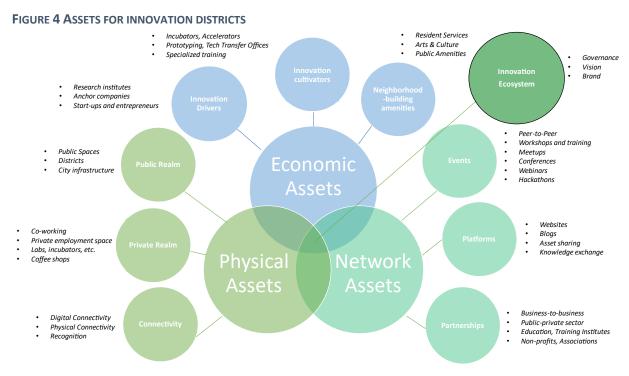
FIGURE 3 SQUAMISH AND REGIONAL INNOVATION MOMENTUM

Momentum Opportunity Alignment	Food and Farm Hub Feasibility Planning and Network Development
	Squamish Labour Force Development Planning
	Spring Activator Program
	Regional SPARK Tourism Challenge
	Squamish Circular Economy Roadmap
	Squamish Circular Economy Trailblazers Program
	Sea to Sky Outdoor Adventure Recreation Enterprise (SOARE) and Innovation Space
	Research and Development Projects (NSERC, MITACS, etc.)
	Squamish Light Industrial Innovation Area
	Yekw'ápsem / Squamish Yards Green Innovation HUB
	Squamish Capilano University Campus
Convergence	Entrepreneurship Programming

# Building innovation ecosystems, best practices

By examining different approaches to developing innovation hubs and districts, and by reviewing various sources, including reports from McKinsey<sup>2</sup> and Brooking Institute<sup>3</sup> concepts such as the Triple-Helix model<sup>4</sup>, Social Innovation<sup>5</sup>, and Theory U<sup>6</sup> were explored. To identify critical factors for cultivating a vibrant innovation ecosystem, case studies of thriving communities were analyzed.

Figure 4 below summarizes the key components for innovation districts. This asset map was used to develop Squamish's Innovation Framework (Figure 5). Notable assets for development in Squamish include public innovation spaces, community network building, and the development of a platform to share knowledge, and leverage and scale the innovation ecosystem.



Source: Brookings Institute: Framework for Innovation Districts, Bruce Katz and Julie Wagner, District of Squamish

<sup>&</sup>lt;sup>2</sup> <u>Building innovative ecosystems: Accelerating tech hub growth</u> (*View Framework* summary in Appendix), Cameron Davis, Ben Safran, Rachel Schaff, and Lauren Yayboke, McKinsey & Company

<sup>&</sup>lt;sup>3</sup> <u>The Rise of Innovation Districts: A New Geography of Innovation in America</u>, Bruce Katz and Julie Wagner, *Brookings Institute* 

<sup>&</sup>lt;sup>4</sup> by Dr Vidya Hattangadi, September 26, 2022, in HIGHER EDUCATION, Management https://drvidyahattangadi.com/what-is-the-triple-helix-model-for-innovation/

<sup>&</sup>lt;sup>5</sup> December 10, 2021, https://mitidinnovation.com/recreation/how-to-use-social-innovation-model-in-business/

<sup>&</sup>lt;sup>6</sup> Mulder, P. (2012). Theory U (Scharmer) Retrieved [insert date] from Toolshero: https://www.toolshero.com/leadership/theory-u-scharmer/

Based on this review, we have used elements from various models to create a tailored approach for Squamish. The image below (Figure 5) provides a framework for establishing Squamish as a Hub for Innovation based on our review of assets for innovation districts.

**Economic** Assets Physical **Assets Assets** 

FIGURE 5 SQUAMISH INNOVATION FRAMEWORK

Source: District of Squamish

Like the Brookings model, which depicts assets that comprise an innovation district, we see the innovation ecosystem as a framework consisting of Physical, Economic, and Network Assets in our approach. This ecosystem comes together at the intersection of these elements. The main driving forces behind these pillars are the innovation centre's organizations, institutions, individuals, and resources. Together, they drive innovation forward and support its growth.

This collaborative and dynamic environment fosters innovation, entrepreneurship, and knowledge exchange. The interaction between these interconnected factors fuels the success and liveliness of the ecosystem. It also defines the strategic pillars and priority areas of focus for the next 2-3 years. By connecting the ecosystem with the wider regional and national innovation community, we establish a strong foundation for long-term impact.

Building on the need for strong relationships and connections, a clear governance framework and vision, appropriate resourcing, financial and human resources, and a regional brand is seen as foundational in ensuring innovation can flourish.

# Climate Change and Innovation in Squamish

Squamish is well-situated to realize symbiotic benefits between climate action, resiliency, innovation and economic development. Climate action is a top municipal and provincial priority and a key feature of Council's strategic plan, thus it is important to highlight how climate action and innovation can intersect in Squamish. The previous Emerging Sector Roadmap and Action Plan identified circular economy as a key area for future exploration (Figure 2), and this work has a significant climate element to it as it related directly to waste reduction, more efficient use of materials and reduced embodied emissions associated with the creation of new materials. Existing groups (e.g., the Squamish Climate Action Network, Capilano University, and several pioneering businesses) are important assets (see Figure 4) that should be leveraged and linked into ongoing initiatives. Significant funding opportunities exist in this sphere as well.

Innovation must be incorporated in the upcoming CCAP update in 2024, ongoing implementation of the ZWAP and the Circular Economy Roadmap and Implementation Plan. Other opportunities to link climate change and innovation should be constantly considered, with support from experts within the Innovation working group, through the broader community, within the District, and supporting organizations.

## Case studies in innovation

Squamish has essential elements for a thriving innovation ecosystem, including a high quality of life and a culture of entrepreneurship. While partnerships are still developing, inadequate infrastructure and limited supportive programs like innovation hubs and incubators represent a gap. Building an innovative community requires a supportive environment for creativity, collaboration, and entrepreneurship. Communities like Boulder, Aarhus, and Waterloo demonstrate what's achievable.

Our case study review identified the following factors as critical building blocks of success:

- 1. University partnership
- 2. Entrepreneurial Culture
- 3. Infrastructure
- 4. Quality of Life
- 5. Collaboration and networking
- 6. Investment & incubators
- 1. **Boulder, Colorado** Boulder, Colorado, is recognized as a vibrant innovation hub and a centre for entrepreneurship and technological advancement. The key players include the University, City, Economic Council, Small Business Development Centre, start-ups, venture capital, and a start-up accelerator company. The Innovation Station at Williams Village Center serves as a community space for innovation, providing coworking, mentorship, events, workshops, and prototyping. Boulder

benefits from a strong venture capital presence, which supports funding for research, development, and scaling of new ventures. Factors contributing to Boulder's reputation as an innovation center include the University of Colorado Boulder fostering collaboration, a strong culture of entrepreneurship, a vibrant tech startup scene, supportive infrastructure, an attractive outdoor lifestyle and quality of life, and a commitment to sustainability and green initiatives.



IMAGE 1: INNOVATION STATION AT WILLIAMS VILLAGE CENTER IN BOULDER, COLORADO

2. **Aarhus, Denmark** – Aarhus, Denmark, has established itself as a hub for innovation, focusing on technological advancements, research, and creative industries to drive economic growth and improve quality of life. The key players include the University, City, businesses, public sector, and investors. Aarhus features an Innovation District that supports cluster development with solid knowledge and innovation hubs in industries like food, healthcare, cleantech, ICT, film, fashion, design, and architecture. Aarhus benefits from its university fostering research and collaboration, numerous research institutions, a vibrant entrepreneurial culture with supportive initiatives and networks, government support through funding programs and grants, high quality of life, industry clusters, and excellent infrastructure and connectivity.



IMAGE 2. AARHUS, DENMARK. DESCRIPTION: INNOVATION DISTRICT.

3. Waterloo, Ontario - Waterloo is a renowned innovation hub, particularly in technology and

entrepreneurship. Its collaborative ecosystem, solid educational institutions, research and development capabilities, and supportive business community foster the growth of innovative ventures. Stakeholders include academia, industry, and government, promoting collaboration and knowledge sharing through events and conferences. A notable highlight is Communitech, an industry association and innovation hub providing support, resources, and networking opportunities to technology start-ups and scale-ups. The University of Waterloo's emphasis on technology, engineering, entrepreneurship, and leading research



IMAGE 3. WATERLOO, CANADA. INNOVATION HUB AT COMMUNITECH.

centres further contribute to the innovation landscape. Waterloo's critical factors for success include the university's solid programs and talent attraction, research and development support, infrastructure like the Communitech Innovation Hub, a skilled and diverse workforce, entrepreneurial spirit, proximity to Toronto, and a high quality of life.

See Appendix 1 for full case studies on each community.

# Squamish's innovation ecosystem today

Small communities can face unique challenges when creating an innovation ecosystem, from a lack of critical mass of innovation actors, limited access to capital and other resources, and a lack of innovation infrastructure. Despite these challenges, innovation in small communities can thrive due to their tight-knit communities offering local support and agility.

#### FIGURE 6 SQUAMISH INNOVATION ECOSYSTEM SWOT ANALYSIS

#### Strengths

- Vision for economic development and sector strategy
- Youthful, highly-skilled and experienced talent pool
- New Capilano University campus
- Location/ proximity to Lower Mainland and Whistler
- Risk-taking culture, entrepreneurial mindset
- Strategic focus and support from local government and organizations
- Natural assets and inspiring setting for research and development
- Attractive lifestyle proposition for talent attraction
- Employment land/space development potential (Oceanfront, Squamish Yards, Cheekye, Business Park)

#### **Threats**

- Brain drain
- BC's lagging in innovation
- Canada's IP retention and patent production
- Lagging labour productivity
- Access to capital

#### **SWOT**

#### Weaknesses

- No formal innovation space, no post-secondary research facility
- No formalized innovation networks, investment pools
- Limited housing and childcare access
- Current resource capacity to support innovation
- Mainly micro-sized firms with limited resources for innovation/scale up
- Lack of innovation brand, awareness of innovation of the ecosystem

#### **Opportunities**

- Undiscovered talent pool of remote workers
- Provincial/federal funding focused on innovation
- Provincial/federal on Climate, Circular Economy
- Significant demand for industrial lands
- Significant, untapped regional capital
- Provincial agencies (InBC, InnovateBC, etc.)
- Partnerships with other ecosystems

# Outcomes, Key Actions, and Strategic Recommendations

As part of the Innovation Working Group session held in May, participants identified several goals to guide the development of Squamish's innovation ecosystem, overcome obstacles, and drive progress. Building on these goals and considering Squamish's Innovation Framework, the following table includes strategic outcomes, actions, and progress measures to guide the development of Squamish's innovation ecosystem.

# **STRATEGIC** Squamish is a strong and diverse economy where innovation and **OUTCOMES** entrepreneurship thrive. A sustainable and responsible economic development approach, using the principles of the circular economy and innovation, tackles societal and environmental issues, finding creative solutions that bring positive change to communities and the planet and lower GHG emissions. Squamish's innovation ecosystem exemplifies diversity, equity, and inclusion and is a supportive and inclusive environment that encourages innovation and risk-taking. Squamish more easily attracts and retains a diverse range of talent, including innovators and entrepreneurs, while a supporting skilled workforce is in place to meet the growing demand of priority sectors. There is access to local and regional funding and investment opportunities through program and partnership development that spurs local innovation and boosts the competitiveness of local industries. Appropriate and necessary local infrastructure is established, which spurs the development and commercialization of new technologies, products, and services increases. A robust network of partnerships and collaborations within the ecosystem among industry, academia, government and supporting organizations. Partnerships with other ecosystems exists, which promotes knowledge sharing and drives the development of priority sectors within the local economy, meeting relevant provincial and federal priorities. **KEY ACTIONS** Foster innovation as a critical value for Squamish and the broader region, positioning the region as an ecosystem for innovative solutions and forward-thinking approaches that a foster a sustainable and just economy.

- Develop brand awareness and consideration for Squamish and the broader region as an innovation ecosystem to drive firm growth, investment, talent attraction.
   Plan for resourcing needs of the ecosystem, including the establishment and growth of the ecosystem, while building the talent and funding pipeline, and capital network to be deployed to innovators and startups.
  - Work with partners in academia, industry, government and supporting organizations to create physical and online space and programming for a flourishing open, supportive, and inclusive community.
  - Connect to broader networks while establishing local networks that enable incubators, accelerators, investor, and mentor networks regionally.

### PROGRESS MEASURES

### Governance, Vision, Resourcing, Branding

- Brand perception (sentiment)
- Annual investment in ecosystem building
- Local community sentiment
- Ecosystem rating(s)
- Media mentions
- GHG reductions

#### **Physical Assets**

- Innovation space established physical and online (asset inventory)
- Utilization of space physical and online
- User sentiment

### **Network Assets**

- Network Strength (members and engagement)
- Activation events and participation
- Diversity of engagement
- Value of partnerships
- Active mentorships

#### **Economic Assets**

- Anchor companies (number, participation)
- Size of local Network (# of startups, # of employed in each cluster)
- Patents, IP, etc.
- Specialized training programs (participants, satisfaction)
- Company growth assets (accelerators, incubators, etc.)
- Funding pipeline established.
- Dollars deployed in the local ecosystem.

In addition, to supporting outcomes and actions identified in the table above, specific recommendations are included below, which align with Squamish's Innovation Framework.

FRAMEWORK	RECOMMENDATIONS
ELEMENTS	
1. GOVERNANCE	A lead ensures effective coordination, gathering resources, and providing strategic guidance for the innovation ecosystem, making it more likely to succeed, last, and expand. The lead acts as a catalyst, driving, coordinating, and promoting collaboration, innovation, and economic development within the ecosystem and the wider community, ensuring a cohesive vision, and inspiring the innovation community to participate.
	1. a. Although an Innovation Working Group was established under Economic Development, it must be clearly articulated who will lead and be accountable for the Innovation Ecosystem efforts on behalf of Squamish. It is recommended that the District of Squamish Economic Development leads efforts with the close support of the Innovation Working Group, other District departments (e.g., Sustainability), other levels of government and partner organizations. (COMPLETE)
	Supportive government policies, regulations, and initiatives are vital in fostering an innovation ecosystem. This includes creating an enabling regulatory environment, providing grants, and funding opportunities, and developing supportive programs for startups and innovation-driven businesses.
	b. Establish/clarify the role of all levels of government in developing the local innovation ecosystem. (STARTED)
	1. c. Confirm governance approach and formalize (STARTED)
2. VISION	Identifying specific sectors or industries with high innovation potential allows the ecosystem to strategically focus its resources and efforts, maximizing impact and fostering concentrated growth. This includes connecting the sectors or clusters and working across them, inviting the broader Sea to Sky Corridor to come together to solve meaningful problems for the community.
	2. a. Confirm our innovation "why" and aspirations (COMPLETE)
	2. b. Since Squamish has identified a sector ecosystem for focus and which includes sectors such as Tourism, Transportation, High Tech, and Creative industries and emerging sectors part of Squamish's Green and Outdoor Recreation economies, a recommendation is to select a subset of clusters to work closely with where innovation is more emergent, and new activities can be easily piloted. (STARTED)

3. RESOURCING	Human and financial capital are critical aspects of building any innovation initiative forward. Identify, set, and commit annual funding to support the establishment and growth of the innovation ecosystem in Squamish; this does not include capital moving into startups.  3. a. Identify human resource and funding needs on an annual laddered approach (growth year-over-year) to support the innovation ecosystem. Ensure the ecosystem is well-resourced to provide the foundations and establish the ecosystem.  (STARTED)
4. BRANDING	Building a solid brand for the ecosystem goes beyond visuals, starting with cultivating meaningful relationships with stakeholders, fostering trust, and consistently delivering value to create a positive reputation and attract further engagement.  4. a. Develop a brand and activation strategy that defines the ecosystem's positioning, core messaging, and brand identity elements as aligned with Squamish (NOT STARTED)
	<ul> <li>4. b. Identify and develop required communication tools and assets and methods to use (NOT STARTED)</li> <li>4. c. Build out relevant innovator stories/content to utilize as leading components of storytelling. Celebrate and highlight local entrepreneurial success stories to inspire and encourage others to take risks. (NOT STARTED)</li> <li>4. d. Establish a local campaign to engage the community and potential partners, including local stories, value propositions, and calls to action. (NOT STARTED)</li> </ul>
5. NETWORK ASSETS	Community participation is crucial in an innovation ecosystem as it empowers residents, businesses, and organizations to actively contribute, collaborate, and shape the ecosystem's development. By involving the community in decision-making processes, fostering inclusivity, and providing opportunities for engagement, the innovation ecosystem can harness its community members' collective wisdom, creativity, and support, leading to a more impactful and sustainable ecosystem.
	5. a. Develop a <b>Network Plan</b> (internal and external), including an extended ecosystem map. Build out a cluster map of sectors and identify opportunities and gaps. (NOT STARTED)
	5. b. Establish mentorship programs where experienced entrepreneurs can guide and support aspiring innovators in navigating the challenges of entrepreneurship. (NOT STARTED)

- 5. c. To expand collaborative networks, partner with nearby innovation ecosystems in the lower mainland and across BC, educational institutions, and research organizations. (STARTED)
- 5. d. Facilitate programs and services that support innovators/entrepreneurs (STARTED)
- 5. e. Create networking events, and industry forums, to facilitate collaboration, knowledge sharing, and mentorship opportunities within the community. Host, specific, priority sector, cross-sector, and regional events to activate the community. (STARTED)
- 5. f. Support innovation pilot projects aligned with strategic innovation goals (NOT STARTED)
- 5. g. Develop an online home for the community where entrepreneurs and innovators can connect, share insights, and collaborate virtually. (NOT STARTED)
- 5.h. Identify innovation opportunities in line with the BC Technology and Innovation Policy Roadmap (NOT STARTED)

#### 6. PHYSICAL ASSETS

Physical Assets are public and privately-owned spaces—buildings, open spaces, parks, streets, hubs, nodes, and other infrastructure—designed and organized to stimulate new and higher levels of connectivity, collaboration, and innovation. Open public spaces like parks may offer wireless internet access to promote utilization, while streets can be utilized for piloting novel projects or ideas. On the other hand, private spaces are designed to foster innovation and collaboration by providing access to shared work and laboratory spaces and smaller, more affordable areas tailored for startups.

- 6. a. Develop an **Innovation Space Plan** local innovation space and infrastructure needs, vision, objectives, funding requirements, and design the desired space (NOT STARTED)
- 6. b. Identify which infrastructure, programs and services are appropriate for entrepreneurs and innovators to access outside the immediate region. (STARTED)
- 6. c. Seek funding and grants to improve infrastructure and connectivity in smaller communities. (STARTED)
- 6. d. Create and support the development of innovation hub(s) and spaces offering suitable infrastructure and resources for regionally based entrepreneurs and innovators. (STARTED)
- 6. e. Foster resource-sharing initiatives within the ecosystem, such as shared workspaces or equipment, to maximize limited resources. (STARTED)

7. ECONOMIC ASSETS	Economic Assets are the firms, institutions and organizations that drive, cultivate and support innovation. Anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators to build economic assets and develop Innovation Districts.
	7. a. Develop a <b>Knowledge Plan</b> for the ecosystem, including mapping out partnerships, business community needs, and potential programming needs. (STARTED)
	7. b. Foster collaboration with local and regional post-secondary universities to jointly develop programming, hubs, and work-placement opportunities, fostering the growth and retention of local talent while promoting business development.  (STARTED)
	7. c. Organize entrepreneurship training programs and workshops to promote a culture of innovation, risk-taking, and resilience. (NOT STARTED)
	7. d. Engage priority sectors and sector leads/anchors to be part of the Innovation Ecosystem work. (STARTED)
	Capital is often one of a company's most significant barriers to growth.  Enabling a funding environment for local priority clusters and innovators will be vital in positioning the ecosystem.
	7. e. Cultivate relationships with angel investors, venture capital firms, and crowdfunding platforms outside the community to access additional funding sources. (STARTED)
	7. f. Establish local investment networks or angel investor groups to fund and support local startups. (STARTED)
	7. g. Develop a comprehensive funding guide for innovators that outlines available funding opportunities and assists innovators in navigating the funding landscape (NOT STARTED)
	7.h. Implement innovation priorities into internal processes for land-use planning at the District of Squamish (NOT STARTED)

# Proposed Implementation Timeline:

While innovation recommendations are presently being actioned by the District and regional organizations, a coordination of efforts, using the Innovation Roadmap as a guide, with supportive funding, will better allow the region to realize innovation outcomes, and with a shorter runway to success. The following provides general timelines for the development and implementation of foundational and innovation assets.

Recommendation	Start	End
Governance and Visioning	Q1 2023	Q4 2023
Resource Planning	Q3 2023	Q4 2023
Branding and Communications Planning and	Q1 2024	Q2 2026
Implementation		
Network and Economic Asset Development	Q3 2024	Q2 2026
Physical Infrastructure Asset Planning and Piloting	Q4 2024	Q2 2026

Appendix

# 1. Innovation Ecosystem Case Studies

# 1. Boulder, Colorado

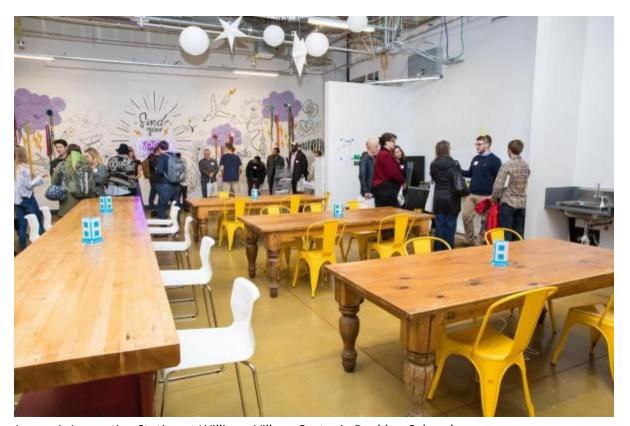


Image 1: Innovation Station at Williams Village Center in Boulder, Colorado

# Size of Community

100,000, similar to the size of Sea to Sky Corridor

#### What is their focus:

Boulder, Colorado, is known for its vibrant innovation ecosystem and has gained a reputation as a hub for entrepreneurship and technological advancement.

#### Who's involved:

University, City, Economic Council, Small Business Development Centre, Start-ups, Venture Capital, Start-up Accelerator company.

### Highlight:

Innovation Station at Williams Village Center in Boulder, Colorado, is intended to convene, educate, and build a community around innovation and entrepreneurship. It is available for everyone - students, staff, faculty, and community members. This maker space serves as a coworking, mentorship, events, workshops, and prototyping space.

### Considerations:

Access to Funding: Boulder benefits from a strong venture capital presence with investors interested in supporting innovative ideas and startups. Funding availability is crucial in nurturing innovation by providing the necessary resources for research, development, and scaling of new ventures.

### Several factors contribute to Boulder's recognition as a center of innovation:

- 1. **University of Colorado Boulder**: The presence of the University of Colorado Boulder fosters collaboration between students, faculty, and the local community, providing a rich environment for research, technology transfer, and entrepreneurial activities.
- 2. **Entrepreneurial Culture**: Boulder has a strong culture of entrepreneurship and innovation. The community values creativity, risk-taking, and problem-solving, encouraging individuals to pursue innovative ideas and start new ventures.
- 3. **Tech Startups and Companies**: Boulder has a vibrant tech startup scene. Companies like Techstars, a renowned startup accelerator, and Foundry Group, a venture capital firm, have their roots in Boulder.
- 4. **Supportive Infrastructure**: Boulder provides a supportive infrastructure for innovation and entrepreneurship. The city offers resources like co-working spaces, incubators, and accelerators that help startups and innovators flourish. Organizations such as the Boulder Economic Council and the Boulder Small Business Development Center provide guidance and support to entrepreneurs and businesses.
- 5. **Outdoor Lifestyle and Quality of Life**: Boulder's natural beauty, outdoor recreational opportunities, and high quality of life attract talented individuals and foster a desirable environment for innovative thinkers. This has led to a concentration of highly skilled professionals, creating a diverse talent pool, and promoting collaboration and knowledge exchange.
- 6. **Sustainability and Green Initiatives**: Boulder has been at the forefront of sustainability and green initiatives. The city is committed to environmental stewardship, renewable energy, and sustainable development. This focus on sustainability has attracted companies and individuals with innovative solutions in areas such as clean energy, ecological conservation, and eco-friendly technologies.

#### Stats:

Boulder is an entrepreneurial powerhouse – similar to Squamish's position as the top city for entrepreneurial presence in BC. In 2010, the city had six times more high-tech start-ups per capita than the nation's average, according to an August 2013 study by the Kauffman Foundation--and twice as many <a href="How Boulder Became America's Startup Capital">How Boulder Became America's Startup Capital</a> | Inc.com

Altogether, venture capital firms invested \$587 million in Colorado in 2012--a far cry from significant venture hubs such as Silicon Valley and New York City (\$11 billion and \$2.3 billion, respectively) but significant. They would instead do that than move to some tony retirement place--because in their minds, Boulder beats 'em all. That's the thing. Pretty much every entrepreneur told me he or she started up in Boulder or stayed in Boulder for that same reason: It's a beautiful place to live. And it's beautiful not because the city forefathers had some nifty pro-start-up policy--but because they had the foresight to plant lots of trees, welcome a university and federal science labs, buy up lots of parkland, and then stay disciplined about preserving the beauty they had created. The idea was simple: Make a city a great place to live, and people figure out how to make a living there. How Boulder Became America's Startup Capital Inc.com

# 2. Aarhus, Denmark



**Image 2. Aarhus, Denmark.** Description: Innovation district, <u>1) Agro Food Park</u>, 2) Life Science / Health, 3) ICT/tech, 4) Creative industries, 5) Cleantech.

What is their focus:

Aarhus, Denmark, has a strong focus on innovation and has established itself as a hub for technological advancements, research, and creative industries. The city aims to create sustainable solutions, improve quality of life, and drive economic growth through innovation.

#### Who's Involved:

University, City, businesses, public sector, investors. The municipality provides support for startups and access to funding and facilitates networking events to connect entrepreneurs with potential partners and investors.

### Highlight:

A major highlight is their <u>Innovation District</u>, that supports cluster development. Within Aarhus' compact geographical area, there are strong knowledge and innovation hubs. These hubs are within food, healthcare, cleantech, ICT and creative industries focusing on film, fashion, design, and architecture.

#### **Hub Highlights:**

INCUBA Science Park
About Agro Food Park

#### Considerations:

Aarhus' population is 500,000. Aarhus also has one of the largest ports in Northern Europe and can accommodate large container vessels. The Danish government has been supportive of innovation and entrepreneurship. It provides funding programs, grants, and tax incentives to startups and innovative projects. Initiatives like Innovation Fund Denmark and Danish Growth Fund support research, development, and innovation activities, which benefit Aarhus as an innovation hub.

#### Aarhus, Denmark, has emerged as a hub for innovation due to several key factors:

- 1. **University:** Aarhus is home to Aarhus University; the university fosters research and collaboration between academia and industry, creating a knowledge-intensive environment that fuels innovation.
- 2. **Research and Development**: Aarhus boasts numerous research institutions and centres, such as the Aarhus University Research Foundation and the Alexandra Institute. These organizations focus on interdisciplinary research, technology transfer, and fostering collaborations between academia, industry, and government.
- 3. **Entrepreneurial Culture:** Aarhus has a vibrant entrepreneurial culture that encourages risk-taking and innovation. The city supports startups through various initiatives, incubators, and accelerators like Startup Aarhus and Incuba Science Park. There is a strong emphasis on creating an ecosystem that enables entrepreneurs to thrive, providing mentorship, networking opportunities, and access to funding.
- 4. Collaboration and Networks: Aarhus emphasizes collaboration across different sectors. The city promotes partnerships between businesses, research institutions, and the public sector. Collaborative networks, such as Katapult Ocean and Open Entrepreneurship, bring together entrepreneurs, investors, and experts to exchange knowledge and ideas.
- 5. **Government Support**: The Danish government invests in research and development, provides grants for startups, and supports initiatives that promote innovation.
- 6. **Quality of Life:** Aarhus offers a high quality of life, making it an attractive place for talented individuals. The city strongly focuses on sustainability, urban development, and a work-life balance. Aarhus' vibrant cultural scene, recreational activities, and excellent public infrastructure contribute to a positive environment for innovation.

- 7. **Industry Clusters:** Aarhus has thriving industry clusters in technology, clean energy, life sciences, and creative industries. The presence of companies, research institutions, and skilled professionals within these clusters fosters knowledge sharing, collaboration, and innovation.
- 8. **Infrastructure and Connectivity**: Aarhus benefits from excellent infrastructure, including a well-connected airport, reliable transportation networks, and a robust digital infrastructure. This enables easy access to global markets and facilitates communication and collaboration with international partners.

#### Stats:

Aarhus is experiencing unprecedented growth. The population is growing, and this growth is projected to continue in the future. Aarhus has been one of Denmark's fastest-developing growth centres for the last ten years. During the same period, unemployment has been the lowest among the bigger Danish cities.

Aarhus Provides Knowledge for Growth (businessaarhus.dk)

In 2009 it announced plans to go carbon neutral by 2030, and it has stayed on track. The city has evaluated 70-plus new technologies to determine which will impact carbon reduction most. <a href="Smart Cities">Smart Cities</a> (nationalgeographic.com)

Home to many international companies with global R&D centers: Arla, Bestseller, Danish Crown, DuPont, Google, IBM, Johnson Controls, JYSK, Lego, Siemens, Uber, and Vestas. Why choose Aarhus? (businessaarhus. dk)

A vibrant, thriving urban community in one of the world's happiest countries (<u>WHR</u>), characterized by income equality, healthy life expectancy, social support, freedom, trust and generosity. <u>Why choose Aarhus?</u> (businessaarhus.dk)

### 3. Waterloo, Canada



Image 3. Waterloo, Canada. Innovation Hub at Communitech.

#### What is their focus:

Waterloo has a reputation as a hub for innovation, particularly in the technology and entrepreneurship sectors. The collaborative ecosystem, solid educational institutions, research and development capabilities, and a supportive business community have created an environment conducive to the growth and success of innovative ventures.

Who's Involved: Waterloo encourages collaboration among various stakeholders, including academia, industry, and government. There is a strong spirit of collaboration and knowledge sharing facilitated by events, conferences, and meetups.

#### Highlight:

Communitech is a leading innovation hub and industry association based in Waterloo. It provides support, resources, and networking opportunities to start-ups and scale-ups in the technology sector. Communitech's programs and initiatives have helped nurture and grow numerous successful technology companies in the region.

#### Considerations:

The University of Waterloo strongly emphasizes technology, engineering, and entrepreneurship. The presence of leading research centers and institutes, such as the Perimeter Institute for Theoretical Physics and the Institute for Quantum Computing, further contributes to the innovation landscape.

### Waterloo, Canada, is known as a hub for innovation due to several key factors:

- 1. **University of Waterloo** is known for its vital engineering, computer science, mathematics, and business programs, attracting top talent and fostering a culture of innovation.
- 2. **Research & Development** with a focus on collaboration between sectors. The region has research centres, incubators, and accelerators supporting technology-driven innovation.
- 3. Infrastructure: Communitech Innovation Hub.
- 4. **Highly skilled and diverse workforce**. The university's cooperative education program integrates work terms with academic studies and has produced a pipeline of talented graduates with practical experience, making them highly sought after by innovative companies.
- 5. **Entrepreneurial Spirit** and supportive community for start-ups (angel investors, venture capitalists, and incubators).
- 6. Proximity to a more significant urban centre (Toronto).
- 7. Waterloo offers a **high quality of life**, with a relatively lower cost of living than larger cities. The region boasts a vibrant arts and culture scene, green spaces, and a strong sense of community.

#### Stats:

<u>Waterloo</u> is among the fastest-growing communities in Canada, a region built on collaboration, innovation, and entrepreneurism. It has the second-highest density of start-ups in the world, along with the headquarters or development offices of some of the world's largest high-tech, automotive, advanced manufacturing and aerospace companies.

Often dubbed the <u>SiliconValley of the North</u>, the region is home to five \$1 billion-plus evaluated companies, including <u>OpenText</u>, <u>BlackBerry</u> and <u>Kik</u>, a deep and well-connected innovation ecosystem, and a patent granted per capita rate almost four times higher than the Canadian average.

The <u>Waterloo Economic Development Corporation</u> (WaterlooEDC) is an independent, not-for-profit organization with a lengthy list of services, programs and resources for companies looking to locate or expand in the region. Those include a world-renowned two-year Accelerator Program, extensive start-up support, and mentorship programs.

Top 6 Reasons Companies Are Moving to Waterloo Region - Perspective

# 2. Decision-Making Matrix

The decision-making matrix can be created by assigning weights or scores to each criterion based on their relative importance to the community and the innovation ecosystem. Each decision can then be evaluated against these criteria, and the scores can be tallied to determine the most favourable options. Regular review and refinement of the decision-making matrix can help ensure its relevance and effectiveness as the ecosystem evolves. This is a matrix example.

Key Criteria	Scoring Defined	Score
Alignment with Ecosystem Goals: Assess the degree to which each decision aligns with the overarching goals and vision of the innovation ecosystem. This ensures that findings contribute to the long-term development and success of the ecosystem.	High Alignment: 3 points Medium Alignment: 2 points Low Alignment: 1 point	
Feasibility and Resource Requirements: Evaluate the feasibility of implementing each decision, considering the available resources, funding, expertise, and infrastructure within the community. Given the community's current capabilities, this criterion helps prioritize decisions that can be effectively executed.	Highly Feasible: 3 points Moderately Feasible: 2 points Low Feasibility: 1 point	
Impact and Potential Return on Investment (ROI): Analyze the potential impact of each decision on the community and the ecosystem's stakeholders. Consider the potential economic, social, and environmental benefits and the possible return on investment in fostering innovation, entrepreneurship, and community development.	High Impact/ROI: 3 points Medium Impact/ROI: 2 points Low Impact/ROI: 1 point	
Stakeholder Engagement and Inclusivity: Evaluate the level of stakeholder engagement and inclusivity associated with each decision. Assess whether the decision incorporates diverse perspectives, involves relevant stakeholders, and encourages collaboration and participation from the community.	High Engagement and Inclusivity: 3 points Medium Engagement and Inclusivity: 2 points Low Engagement and Inclusivity: 1 point	
Long-Term Viability: Consider the long-term viability of each decision. Assess its potential to foster sustainable growth, resilience, and adaptability within the innovation ecosystem, ensuring that findings contribute to its long-term success and continued development.	High Long-Term Viability: 3 points Medium Long-Term Viability: 2 points Low Long-Term Viability: 1 point	
Sustainability Alignment: Assesses the extent to which each decision aligns with sustainability principles from a green and circularity perspective. Higher scores are given to decisions that prioritize environmentally friendly practices contributing to a more sustainable and resilient innovation ecosystem in Squamish, and reduced GHG emissions.	High Sustainability: 3 points Medium Sustainability: 2 points Low Sustainability: 1 point	
	TOTAL	