

PLAYBOOK 2030

A Guide to Building Canada's
Most Liveable Region





From Pandemic to Playbook 2030



In March 2019, a volunteer group from across organized sports, active recreation, tourism, and economic development met to reflect on the future of sport and recreation in the region. While Calgary is renowned for its proximity to mountains and rivers, and its Olympic legacy, this group shared a belief that the scope of the active economy is undervalued.

There was broad consensus that the existing fragmentation in the sector limited its potential. A clear need emerged for a more systematic analysis of how the active economy impacts the economic, human, social and environmental prosperity of our city and region.

Our active economy encompasses active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors. Today this *active economy* includes **95 per cent of the 1.5 million** people living in the Calgary region, incorporating **4,000 enterprises**, employing **43,000 people**, and contributing **\$3.3 billion** to the regional economy.

To activate this diverse ecosystem, we established the *ActiveCITY Collective*, a grassroots collaboration of volunteers engaged in Calgary's regional active economy. In June 2019, *ActiveCITY* agreed to develop a ten-year integrated Playbook for maximizing the active economy's direct impact on Calgary's prosperity. We built a plan to make better leverage Calgary's natural competitive advantages to attract and retain talent to our highly livable city.

Then COVID-19 changed everything.

The impact of COVID-19 cannot be understated. The pandemic is causing seismic economic, human, and social costs to our city and region. As travel and large gatherings are restricted, our outdoor recreation facilities face unprecedented capacity pressure. This has only accelerated the urgency of creating an integrated master plan for our regional active economy. The resulting master plan known as Playbook 2030 is anchored in a strategic framework that will harmonize resources from across the commercial, social and public sectors to strengthen our economic, human, social and environmental prosperity.

While Calgary is facing unforeseen challenges, Playbook 2030 identifies unrealized opportunities and unique advantages. The time is right to deliver a renewed vision for our city and region that leverages our greatest natural resource – our active economy.

Please join us.

The *ActiveCITY* Collective

We acknowledge and recognize that our ActiveCITY is located in the traditional territories of the Niitsitapi (Blackfoot) and the people of the Treaty 7 region in southern Alberta which includes the Siksika, Piikani, Kainai, Tsuu T'ina and the Stoney Nakoda First Nations. The City of Calgary is also home to the Metis Nation of Alberta, Region III

PLAYBOOK 2030 AT A GLANCE

THE PROBLEM

Calgary's rich regional active ecosystem is fragmented and inefficient. The result is its contribution to Calgary's economic, human, social and environmental prosperity is underleveraged.

THE POTENTIAL

ECONOMIC

4,000 enterprises
43,000 employees
Annual direct impact of \$3.3B

Underleveraged areas:

- Billions of impact on healthcare costs.
- Impact on economic productivity
- Talent acquisition
- Talent retention
- Talent development

HUMAN

Impacts 22 preventable health conditions.
Impacts life expectancy by 3.8 years.
Contributes to 20-30% reduction in depression.
Active transportation and urban design contributes to significant impact on health outcomes.

SOCIAL

Largest voluntary sector in Calgary engaging 11,000 people who contribute 14.8M hours annually.
Increases social identity
Increases social engagement
Reduces social isolation
Reduces youth crime

ENVIRONMENT

An active economy contributes to:
Reduction of CO2 emission
Improved air quality
Reduction of nitrogen oxide

THE MISSION

The Calgary regional active economy is recognized as a global leader through a sustained collaborative commitment to the region's economic, human, social and environmental prosperity.

THE PLAN

SHARED VISION

We will establish a centralized organization mandated with facilitating collaboration across the ecosystem to deliver on Playbook 2030 outcomes.

LIVE ACTIVE LIVES

We will advocate integrated planning that promotes open spaces, mixed-used communities, a four-season integrated active transportation network and well-being through active living.

BUILD COMMUNITY

We are committed to ensuring everyone in our community, regardless of age, ability, background, or income, are empowered to participate in the many roles across the regional active economy.

INNOVATE & GROW

The growth of the regional active economy will be driven by agile entrepreneurs, and innovators who aspire to be world leaders. These leaders embrace change as an opportunity.

DRIVE SUSTAINABILITY

We will develop and deploy a sustainability strategy to reduce the impact of the ecosystem on the environment, while committing to leveraging the active economy to reduce our overall region's environmental footprint.

INSPIRE OTHERS

Calgary's regional active economy is recognized by our community, Canadians and the world as our greatest single asset that defines our community's identity.

FOUNDING PARTNERS

The *ActiveCITY* Collective and Playbook 2030 would not have been possible without the generous support of our partners.



PLAYBOOK PARTNERS



TABLE OF CONTENTS

EXECUTIVE SUMMARY	11
What Is Playbook 2030?	11
What Is the Active Economy?	12
What Calgarians Think	13
Insights	14
From Insights to Action	15
SECTION 1: PLANNING FRAMEWORK	18
What Is the Playbook 2030	19
Defining the Active Economy	19
Research Methodology	21
Community Engagement Process	22
SECTION 2: COMMUNITY PROSPERITY	25
SECTION 3: THE REGIONAL ACTIVE ECONOMY	30
Sector View of the Active Economy	31
An Occupation View of the Active Economy	34
A Stakeholder View of the Active Economy	35
A Value Chain View of the Active Economy	35
SECTION 4: COMMUNITY INPUT RESOURCE AUDIT	38
Human Resources Audit	39
Economic Resource Audit	45
Social & Structural Resource Audit	51
Natural Resource Audit	53
Built Resource Audit	55
Summary	57
SECTION 5: ACTIVITY AUDIT	59
Enterprise Audit	60
Fan Engagement	62
Implications	65
SECTION 6: IMPACT ON COMMUNITY PROSPERITY	67
Economic Impact	69
Human Prosperity	72
Social Prosperity	75
Environmental Prosperity	79

SECTION 7: TRENDS INFLUENCING THE FUTURE	81
Trend 1: Social Justice and Change	82
Trend 2: The Covid-19 Longtail	87
Trend 3: Sustainability at the Centre	88
Trend 4: The War for Talent	90
Trend 5: Accelerating Technological Disruption	91
Trend 6: From Consumer to Co-Creator	93
Trend 7: Changing Media Consumption	94
SECTION 8: BEING INSPIRED	96
What Calgarians Think	97
Inspired by the World	99
Inspired in YYC	117
SECTION 9: STRATEGIC FRAMEWORK	132
The Insights	133
SECTION 10: IMPLEMENTATION PATH	142
Implementation Principles	143
Implementation Plan	143
APPENDIX	
Appendix-1: Glossary	150
Appendix-2: Global Benchmarks	159
Appendix-3: National Benchmarks	161
Appendix-4: Regional Plans and Reports	162
Appendix-5: Playbook 2030 Champions	164
Appendix-6: Active Economy by NAICs	165
Appendix-7: Active Economy Postsecondary Programs	167
Appendix-8: Regional Active Economy Structural Capital Examples	168
Appendix-9: Built Resource Audit	169
Appendix-10: Organized Sport and Active Recreation Participation	171
Appendix-11: NAICs by Sector	173
Appendix-12: Strategic Anchor Analysis	176
Appendix-13: Influence of Distance on Cycling	178
Appendix-14: City of Calgary One Calgary Priorities	179
Appendix-15: Photo References	180
Appendix-16: <i>ActiveCITY</i> Community Board Motions	183
Notes	184

FIGURES

Figure 1.1 Calgary's Regional Active Economy	19
Figure 3.1 Community Value Chain	36
Figure 4.1 Growing & Changing Face of Calgary	40
Figure 4.2 Calgary Ethnicity	40
Figure 4.3 The Age Shift	42
Figure 4.4 Per Cent Sufficiently Active	43
Figure 4.5 Per Cent Active & Sedentary by Education	43
Figure 4.6 Perceptions of Stress & Healthy by City	44
Figure 4.7 Median & Low Income by Major Cities	46
Figure 4.8 Calgary GDP and Unemployment Forecast (2020-25)	46
Figure 4.9 Small Business and Self-Employed by City	47
Figure 4.10 Philanthropic Contributions by Major City	48
Figure 4.11 Sense of Belonging by City	50
Figure 4.12 Average Snowfall and Sunshine by City	52
Figure 4.13 Average Snowfall and Sunshine of Major Cities	52
Figure 4.14 Average Carbon Footprint (2010-15)	54
Figure 4.15 Comparative Built Infrastructure	56
Figure 4.16 Aggregated Walk & Bike Score by City	56
Figure 5.1 Regional Active Economy by Employees	60
Figure 5.2 Regional Active Economy by Company Size	60
Figure 5.3 Regional Active Economy City Comparison	61
Figure 5.4 Regional Active Economy City Comparison (By Sector)	61
Figure 5.5 Regional Sport Fans Engagement Index	63
Figure 7.1 Systematic Inequality	82
Figure 7.2 Per cent Active by Income	83
Figure 7.3 Per cent Active by Gender and Age	83
Figure 7.4 What areas are in the greatest need of attention in creating a sustainable future for Calgarians?	89
Figure 7.5 What areas in the greatest need of attention in creating a sustainable future for Calgarians?	89
Figure 8.1 Engagement in Active Economy Today	97

TABLES

Table 1.1 <i>ActiveCITY</i> Volunteer Board of Directors	23
Table 1.2 Playbook 2030 Project Team	24
Table 2.1 Example Models	26
Table 2.2 Example Community Prosperity Indicators	27
Table 3.1 The Eleven Sectors of the Active Economy	31
Table 3.2 Intensity Allocation	33
Table 3.3 Active Economy Stakeholders	35
Table 4.1 City Investment in Active Economy	48
Table 5.1 Other Activities and Outputs	64

CASE STUDIES

Lahti: Herding Cats	100
Bristol: Working Together	101
New York: Get into Schools	102
New York: Plan it and They Will Come	103
Italy: A National Plan	104
Oklahoma City: Getting a City Active	105
Montreal: Snow Excuse	106
Stockholm: Safety First	107
Buenos Aires: Overcoming Congestion	108
Zurich: Active City	109
East Harlem: People-First	110
Burlington: Nothing Happens Without a Plan	111
Copenhagen: People-Driven	112
Jharkhand: Getting Women Engaged in Sport	113
United Kingdom: Reimagining Ageing	114
Boston: Technology Enabled	115
ActiveLab: Technology is key to Success	116
Adapted Hub: Sport for All in Calgary	118
Shaw Charity Classic: Leadership	119
Copperfield School: Active School Travel Project	120
Kidsport Calgary: All in	121
Indigenous Sport: Path to Reconciliation	122
YYC Kids Ride: Inclusive Fun	123
Intuitive Engineering: Think Different	124
Glenbrook Multisport Community Centre	125
PlayCity: Build Community with Tech	126
AdrianMartinus Design: From Skateboards to Art	127
Garmin: World Leader in Wearables	128
Resorts of the Canadian Rockies	129
Canadian Tire Jumpstart	130

Cover Page and Infographic Design by: [Natelle Thompson](#)

Playbook Design by: [Alexander Brodie](#)



EXECUTIVE SUMMARY

WHAT IS PLAYBOOK 2030?

Playbook 2030 is designed with one goal – to transform Calgary into Canada’s most livable region. To do this, we established a globally leading vision for Calgary’s regional active economy – encompassing active living, sport, recreation, health & wellness, and all other associated sectors. Playbook 2030 is the first phase of a ten-year master plan to maximize the active economy’s direct impact on our livability which is measured by economic, human, social, and environmental prosperity.

Playbook 2030 was facilitated by the *ActiveCITY* Collective, a collaboration of social, commercial and public sector enterprises and individuals engaged in the Calgary regional active economy. Our regional active economy incorporates three cities, six towns, two First Nations, and multiple school boards, impacting more than 20 policy areas at all levels of government. Moreover, it is anchored in listening to the rich diverse voices that define the future of our community.



WHAT IS THE ACTIVE ECONOMY?

The **active economy** incorporates all enterprises participating in, or contributing to, improving individual or community prosperity through the development and delivery of active living, sport, **active recreation**, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors. Calgary's regional active economy includes 3,945 commercial, social, and public enterprises, employing 42,658 people and engaging 111,000 volunteers. In total, we estimate over 1.5 million local people are directly engaged in our diverse regional active economy.

HOW IT WAS DEVELOPED?

Between May 2019 and October 2020, an *ActiveCITY* Collective research team compiled existing evidence on the scope and impact of the active economy. This research included over 300 peer-reviewed studies and policy reports, and 70 benchmark reports from diverse jurisdictions. Each study and report were audited, with emphasis put on empirical research that provided evidence of a systematic impact on human, economic, social, and environmental community prosperity. Concurrently, leveraging the reach of ecosystem partners, we initiated one of the largest public engagement processes in the city's history, engaging over 23,000 people. Our goal was to hear from a diverse, cross-section of individuals and hopefully overcome traditional and siloed thinking that has in our opinion impaired our ecosystem for decades.



WHAT CALGARIANS THINK

23,000

CALGARIANS ENGAGED
OVER 18 MONTHS

WHY DID YOU CHOOSE CALGARY?

1. FAMILY & FRIENDS
2. CAREER OPPORTUNITIES
3. SAFE COMMUNITY
4. ACTIVE OPPORTUNITIES

HOW CAN WE IMPROVE LIFE FOR CALGARIANS?

1. STRENGTHEN OUR
ECONOMY
2. DESIGN WALKABLE
AND CONNECTED
COMMUNITIES

WHAT MAKES CALGARY SO ACTIVE?

1. THE RIVERS
2. OUR PATHWAYS
3. OUR PARKS
4. THE MOUNTAINS
5. OUR SPORTS TEAMS

HOW DO WE BECOME THE BEST?

1. BECOME THE BEST CYCLING
CITY IN NORTH AMERICA
2. CONNECT AND EXPAND OUR
PATHWAY SYSTEM
3. EXPAND OUR PARKS AND
GREEN SPACES
4. ENSURE ALL CALGARIANS
CAN AFFORD TO PARTICIPATE
5. DESIGN PROGRAMS AND
INFRASTRUCTURE FOR OLD
AND YOUNG
6. WE ARE WINTER. OWN IT.

72%

DEFINE THEMSELVES
AS ACTIVE TODAY

82%

BELIEVE CALGARY IS
AN ACTIVE CITY

CALGARIANS SPEND
MORE ON GARDENING
THAN ANY OTHER
CITY IN CANADA

CALGARY SPENDS
2X MORE ON SPORTS
& RECREATION THAN
THE NATIONAL AVERAGE

PLAYBOOK 2030

INSIGHTS

INSIGHT 1



Community Prosperity

The regional active economy's value is measured by how it contributes to the region's economic, human, social and natural environment prosperity.

INSIGHT 2



A Unique Community Asset

The active economy directly engages 95 per cent of our community today.

INSIGHT 3



Ethnic Diversity

Calgary is the third most ethnically diverse city in Canada. The active economy must be equally dynamic to meet our community's changing needs.

INSIGHT 4



Fragmented

The regional active economy incorporates 4,000 commercial, social, and public enterprises and 24 policy areas and lack of shared vision.

INSIGHT 5



Winners & Losers

The lack of shared vision creates a zero-sum culture of winners and losers. The result is constrained growth.

INSIGHT 6



Economic Reality

The structural changes to the energy sector combined with the impacts of COVID-19 will have sustained economic consequences on the region.

INSIGHT 7



Human Impact

The regional active economy contributes to a reduction of over two dozen physical and mental health conditions, extending life expectancy by 3.9 years.

INSIGHT 8



Social Impact

The regional active economy contributes measurably to community cohesion, social inclusion, civic identity and active citizenship.

INSIGHT 9



Environmental Impact

Evidence demonstrates that a well-designed regional active economy can have a measurable environmental impact in areas such as pollution and carbon emissions.

INSIGHT 10



Economic Impacts

The active economy employees 43,000 Calgarians and contributes \$3.3B directly to the regional GDP.

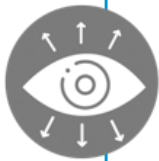
FROM INSIGHT TO ACTION

Vision: Calgary is Canada's most livable region.

Mission: The Calgary regional active economy (RAE) is recognized as a global leader through a sustained collaborative commitment *to the region's economic, human, social and environmental prosperity.*

A Shared Vision

The RAE is integrated, and actionable, fostering collaboration and learning that leads to sustainable community prosperity.



Goals

1. The RAE is recognized as a global leader for its sustained commitment to collaboration.
2. The active economy is a central policy issues facing all levels of governments.

Priorities

1. Put people first.
2. Embed a culture of collaboration.
3. Operationalize as a collective
4. Develop rigorous performance measures.

Live Active Lives

The RAE is committed to enhancing physical and mental health and wellbeing by embedding physical activity into all aspects of life.



Goals

1. Lead Canada in all indicators of physical and mental health.
2. Lead Canada in active transportation adoption.
3. Lead Canada in the adoption of small business workplace wellbeing.
4. Lead Canada in the integration of school based physical activity.

Priorities

1. Advocate for sustained investment in:
 - Active transportation
 - Workplace wellness.
 - Regional transportation.
 - Integrate schools into an active regional plan.

Build Community

The RAE connects and builds community. We are committed to ensuring everyone in our community, regardless of age, ability, background, or income, are empowered to participate in the many roles of our RAE.



Goals

1. Lead Canada in inclusive governance of our RAE.
2. Lead Canada in indicators of physical activity.
3. Lead Canada in indicators of social cohesion.

Priorities

1. Commit to ensuring inclusive governance.
2. Develop ecosystem-level strategies to increase physical activity within marginalized communities.
3. Develop a RAE human capital strategy.



Innovate & Grow

The RAE is driven by agile entrepreneurs, and innovators who aspire to be global leaders by embracing disruption as an opportunity.



Goals

1. Lead Canada in direct economic contribution of RAE to the regional GDP.
2. Lead Canada in active economy start-ups.
3. Double its economic contribution of RAE to the regional GDP.

Priorities

1. Provide support for enterprise scaling.
2. Develop a RAE investment program.
3. Facilitate harmonizing ecosystem collaboration utilizing technology.

Drive Sustainability

The RAE must be sustainable and protected for future generations.



Goals

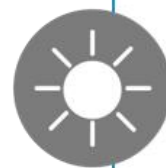
1. Lead Canada in active economy energy consumption reduction.
2. Lead Canada in active economy water consumption reduction.
3. Lead Canada in active economy waste reduction.

Priorities

1. Advocating for sustained investment in active urban planning and active transportation.

Inspire Others

The RAE is recognized by our community, Canadians and the world as the Calgary region's greatest single asset that defines our community's identity.



Goals

1. The RAE is recognized as a global leader in its contribution to community prosperity.
2. The RAE is recognized as a global leader in its contribution to talent attraction and retention.
3. The Calgary region is the leading destination for active economy enterprises.

Priorities

1. Deploy coordinated and sustained key messaging across the ecosystem.
2. Embed the RAE as a pillar to drive talent attraction and retention across all sectors.



1

PLANNING FRAMEWORK

The *ActiveCITY* Collective is a collaboration of commercial, social and public sector enterprises and individuals engaged in Calgary's \$3.3 billion regional active economy. The active economy incorporates all enterprises who participate in, or contribute to, improving individual and/or community level wellbeing through the development and delivery of active living, sport, physical activity, and active recreation experiences. Our objective is to facilitate collaboration, debate, learning and connection to shape system-wide solutions. The ultimate goal of the *ActiveCITY* Collective is to transform Calgary into Canada's most livable region by maximizing the potential of our natural competitive advantage – the active economy.

WHAT IS THE PLAYBOOK 2030

Developed over 18 months, the goal of Playbook 2030 is to establish a globally leading vision for Calgary’s regional active economy and an integrated strategic framework to deliver on this vision. For this reason, consider Playbook 2030 as the first phase of a ten-year **master plan** for Calgary’s regional active economy. As with any plan for a \$3.3 billion business, incorporating almost 4,000 commercial, social, and public enterprises, impacting 1.5 million people, Playbook 2030 is designed to be systematic, rigorous and **evidence-based**.

DEFINING THE ACTIVE ECONOMY

A regional active economy incorporates all enterprises participating in, or contributing to, improving individual or community prosperity through the active recreation and health and wellness experiences.

The term ecosystem is also used throughout this Playbook and this is referring to the interconnections of eleven sub-sectors within the Active Economy (Refer to Figure 1.1). In the context of Calgary’s regional active economy, this includes 3,945 commercial, social, and public enterprises employing 42,658 **full time equivalent (FTE)** and engaging 111,000 volunteers. In total, Playbook 2030 estimates 1.5 million people are currently engaged in one or more roles in Calgary’s regional active economy.

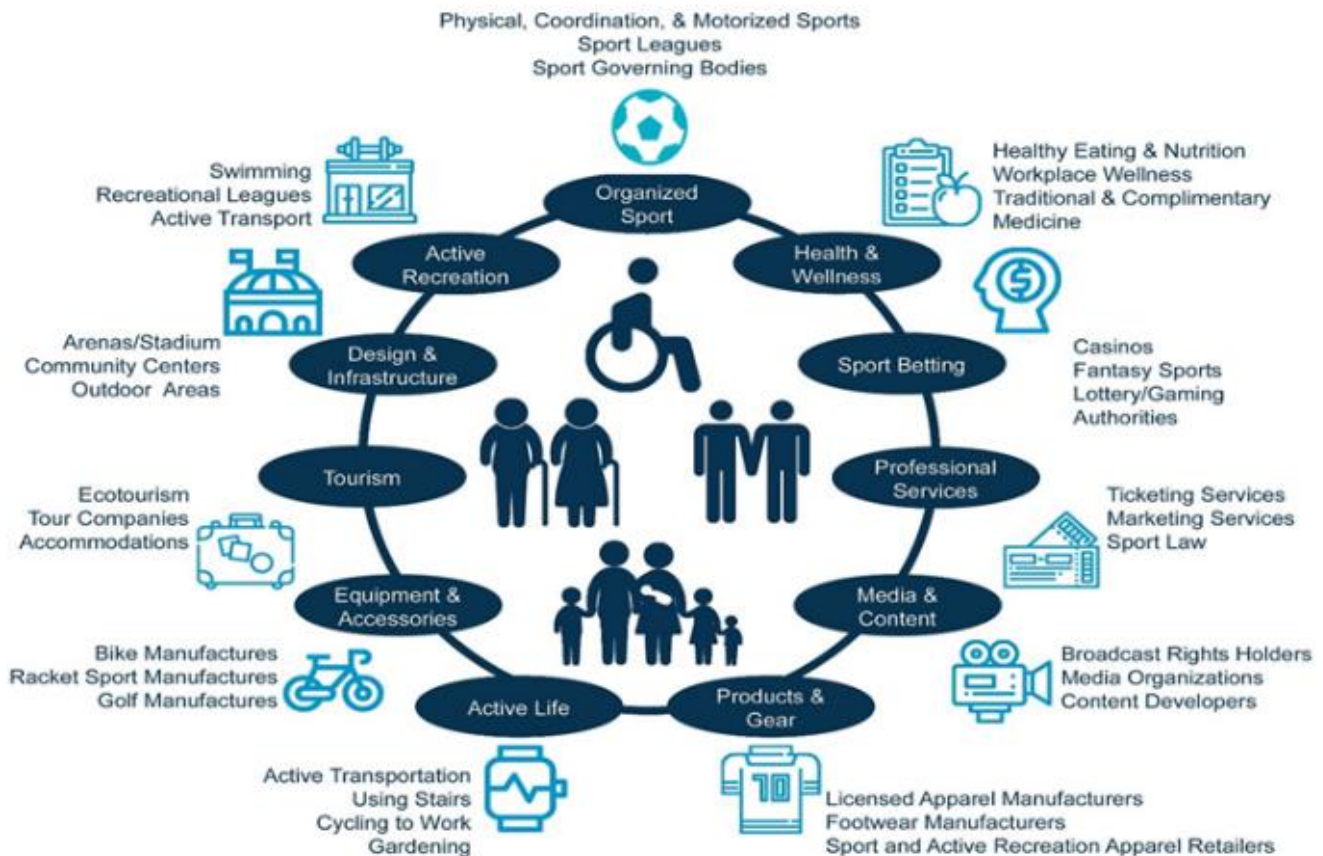


Figure 1.1: Calgary’s Regional Active Economy

REGIONAL SCOPE

A critical principle of the *ActiveCITY* Collective is that an active city is not defined by geography but rather is the intersection of people and place. For some, their active city may be rooted in a community garden, while for others it might be the slopes of the Canadian Rockies or cycling on the open prairies. For this reason, the geographic scope of our active city is unique to each of us.

For data analysis purposes, the Playbook 2030 defines the scope of Calgary's regional active economy as encompassing Calgary's **Census Metropolitan Area (CMA)** as defined by Statistics Canada.¹ The project team chose to include for instance the towns of Banff, Canmore, Strathmore, the village of Lake Louise and the Siksika Nation. In total, the geographic scope of Calgary's regional active economy includes:

Cities

- Airdrie
- Calgary
- Chestermere

Towns

- Banff
- Bragg Creek
- Canmore
- Cochrane
- Crossfield
- Didsbury
- Irricana
- Okotoks
- Strathmore

Villages

- Beiseker
- Lake Louise

Municipal Districts

- Rocky View County

First Nations

- Tsuu T'ina Nation 145
- Siksika Nation 146

By adopting this regional view, the *ActiveCITY* Collective does not propose Playbook 2030 is a unified plan encompassing three cities, six towns, four villages, two municipal districts, two First Nations, associated school boards, one national park and dozens of provincial parks and recreation areas. Rather, Playbook 2030 adopts a lens that considers the economic, human, social, natural, and built resources in this geographic region as central to Calgary's regional active economy and an individual's ability to utilize these resources to support their personal and professional goals.

STAKEHOLDERS SCOPE

An **active economy stakeholder** is defined as any individual or enterprise that has an interest in, or is impacted by, the active economy. This includes all forms of engagement in the active economy such as **participant, administrator, enabler, policymaker, and supporter** (e.g. fan). In total, Playbook 2030 estimates 1.5 million people are engaged directly in Calgary's regional active economy.

POLICY SCOPE

The formation of the *ActiveCITY* Collective in 2019 and Playbook 2030 is a direct **legacy** of the Calgary 2026 Olympic and Paralympic bid exploration process. This process highlighted to us the numerous gaps that existed in bridging the diverse active economy, which transcend commercial, social, and public enterprises and impacts at least 24 policy areas across federal, provincial and municipal governments. This includes:

- Accessibility
- Active recreation
- Active transport
- Climate change
- Crime prevention
- Diversity and multiculturalism
- Economic diversification
- Education & learning
- High-performance sport
- Human capital
- Income inequality
- Infrastructure
- Innovation & entrepreneurship
- Inter-governmental affairs
- Mental health
- Seniors
- Organized sport
- Parks (municipal, provincial, national)
- Regional planning
- Urban planning
- *Preventative healthcare*
- Public transit
- Roads and paths
- Social cohesion

The Playbook 2030's goal is thus to develop a comprehensive framework encompassing all of these areas to ensure that the potential impact of the active economy on the community is maximized through a shared vision, with key **performance measures** and increased collaboration and harmonization of priorities and resources.

RESEARCH METHODOLOGY



Between May 2019 and October 2020, the *ActiveCITY* Collective compiled existing evidence on the scope and impact of an active economy. This included over 300 peer-reviewed studies and policy reports, and 70 benchmark reports. Each was audited, with emphasis put on empirical research. The impacts identified were then clustered into major categories using a community prosperity index with four main impact groups: economic, human, social, and environmental (Refer to Section 2). In addition, during the research and analysis phase, the project team identified and mapped the systemic relationships among these factors. The purpose of this last step was to isolate the factors (e.g. programs, infrastructure etc.) that had the highest potential impact on community prosperity.

At the same time, the Collective engaged a broad cross section of citizens to ensure a **diversity** of perspectives. Over 23,000 citizens completed online surveys.

A third method of data collection that influenced our thinking was through hosting 18 weekly online forums and interviewing 23 thought leaders that were also shared as podcasts.

SECONDARY RESEARCH PROCESS

GLOBAL BENCHMARKING

Another critical element of the Playbook research was auditing economic plans including those done at the civic, state/province, national and international levels. The project team reviewed 70 global plans related to the 24 policy areas identified. Refer to Appendices 2-4 for the complete list of benchmarks.

REGIONAL PLANNING AUDIT

A final step for Playbook 2030 was to look at existing attempts to operationalize the active

economy components. The project team identified 69 existing City of Calgary and related civic plans that were directly or indirectly linked to the active economy (Refer to Appendix 4 for the full list). This includes those focused on parks, recreation, transportation, and municipal development. Local and civic partner plans were also included from organizations such as Calgary Arts Development, Sport Calgary, Calgary Stampede and Sustainable Calgary. Finally, local plans were incorporated from surrounding communities. During the analysis, the project team refined these to 24 anchor plans. In doing so, the team identified priority areas of collaboration and harmonization to maximize the allocation of resources on a shared goal (Refer to Appendix 12 for the outcome of this analysis).

INSIGHT ICONS

Throughout the report you will see a series of icons that link to one of the ten insights identified through our research.



COMMUNITY ENGAGEMENT PROCESS

To deliver on the goals of Playbook 2030, *ActiveCITY* Collective engaged a diversity of voices through structured community engagement, expert advice, a project steering committee and the *ActiveCITY* volunteer board.

COMMUNITY CONSULTATION

In 2019, the *ActiveCITY* board committed themselves to ensuring that Playbook 2030 was anchored in one of the largest community consultations in the city's history.² To achieve this, the Collective worked with partner organizations from across the city, both inside and outside of the active economy, to support, enable and promote engagement. This took two primary forms over 18-months:

1. Hosting 21 *ActiveCITY* Workshops and Forums (face-to-face and virtual)
2. Community Online Crowdsourcing

The input from these channels were synthesized and continually refined. As of today, Playbook 2030 has engaged 23,000 citizens achieving the board's goal of being one of the largest public engagement exercises in the city's history.

Great plans are living documents and this Playbook is just scratching the surface of community sourced innovations and insights. As Playbook 2030 moves forward, the respective organizations and leaders responsible for activating and implementing it, should continually engage stakeholders, ensuring Playbook 2030 is everyone's Playbook.

ACTIVECITY VOLUNTEER BOARD OF DIRECTORS (2019-20)

The *ActiveCITY* Collective is governed by a volunteer Board of Directors. The current Board of Directors term extends from June 1, 2019 to December 31, 2020. The volunteer board members were appointed to represent the diversity of Calgary's regional active economy. Refer to Table 1.1 for a list of the Board of Directors from 2019-21.





Table 1.1: ActiveCITY Volunteer Board of Directors

Name	Related Expertise	Affiliation
Karen Ball	Community building	Calgary Chamber of Voluntary Organizations
Perry Berezan	High-performance sports	Berezan Sherven Group
Jeff Booke	Recreation administration	Repsol Centre
Jeff Daniels	Sport tourism	Tourism Calgary
Jesse Fehr	Community development	Evolve Lacrosse
David Finch (Co-Chair)	Strategic planning	Mount Royal University
John Francis	Marketing	Western Financial Group
Candice Goudie	Community building	Calgary Sports & Entertainment Corporation
Dale Henwood	High-performance sports	Canadian Sport Institute Calgary
Jeff Horvath	Community building	Tsuu T'ina High School
Vince Ircandia	Active economy entrepreneurship	StellarAlgo
Jennifer Johnson	Community partnerships	ATB Financial
Rob Kerr	Community building	Calgary Hitmen
Jennifer Konopaki	Recreation administration	WinSport
Elaine Kupser	Media	Impact Magazine
Christy Lane	Active economy entrepreneurship	Mount Royal University
David Legg (Co-Chair)	Parasport	Mount Royal University
Catriona Le May Doan	Sport Calgary/ high-performance sport	Sport Calgary
Haifiz Mitha	Active economy entrepreneurship	PlayCity
Nathaniel Miller	Community building	Inn from the Cold
Richard Monette	Community building	Active for Life
Mary Moran	Community building	Calgary Economic Development
Matt Mosteller	Outdoor recreation	Resorts of the Canadian Rockies
Tim Olafson	Research	Stone-Olafson
Russ Reimer	Community partnerships	Manifesto Sport Management
Jason Ribeiro	Community building	Calgary Economic Development
Jessie Seymour	Community development	Brookfield Residential
Trevor Tombe	Economics	University of Calgary
Cynthia Watson	Recreation administration	VIVO
John Windwick	Community partnerships	ATB
Robert Wise	Event management	Calgary Stampede
Ex-Officio		
Patti Pon	Arts development	Calgary Arts Development Corporation
Norm O'Reilly	Sport management	University of Guelph
Terry Rock	Community building	Platform
Ray DePaul	Entrepreneurship	Mount Royal University

PLAYBOOK PROJECT TEAM

A Steering Committee was tasked to oversee the development of Playbook 2030. The Steering Committee (Refer to Table 1.2) was supported by a research team, composed of student researchers from Mount Royal University.

Table 1.2: Playbook 2030 Project Team

Steering Committee	Related Expertise	Affiliation
Dawn Burke	Sport Policy	City of Calgary
Jenn Duqgan	Community Building	City of Calgary
Katrina Galas	Marketing & Strategic Planning, Sport & Active Brands	In Common Consulting
Dale Henwood	High-Performance Sport	Canadian Sport Institute Calgary
Jeff Horvath	Community Building	Tsuu T'ina High School
Jenn Johnson	Community Partnerships	ATB
Jennifer Konopaki	Recreation Administration	WinSport
Rob Kerr	Community Building	Calgary Hitmen
Nathaniel Miller	Community Building	Inn from the Cold
Hafiz Mitha	Entrepreneurship	PlayCITY
Andrew Tankard	Design	GEC Architecture
Brian Torrance	Active School Programming	Ever Active Schools
Cynthia Watson	Recreation Administration	VIVO
Research Team	Role	Affiliation
David J. Finch	Project Manager	Mount Royal University
David Legg	Stakeholder Engagement	Mount Royal University
Alex Brodie	Researcher & Media Production	Mount Royal University
Courtney Brown	Researcher	Mount Royal University
Drew Jones	Researcher	Mount Royal University
Rob Leduc	Playbook 2030 Coordinator	Mount Royal University
Earl Webb	Communications Coordinator	Mount Royal University

PLAYBOOK 2030 CHAMPIONS

Lastly, a team of diverse *ActiveCITY* Champions were appointed by the Steering Committee to provide specific insight and expertise during the early development of the Playbook. Refer to Appendix 5 for the full list of the *ActiveCITY* Champions.



2

COMMUNITY PROSPERITY

The core principle of the *ActiveCITY* Collective is that the active economy is not an end unto itself. Rather, the active economy supports the prosperity of the community and everyone who lives in it. This is because almost all of us participate in the active economy even though some do not necessarily self-identify with this concept.

Community prosperity, meanwhile, is a multi-dimensional concept, framed by value judgements at an individual and community level. Numerous organizations already report city-level indicators linked to dimensions of community prosperity. Examples include the Citizen Satisfaction Survey (City of Calgary), Vital Signs (Calgary Foundation), and State of our City (Sustainable Calgary). The challenge is the lack of harmonization on community prosperity indicators and the resulting confusion among policymakers and Calgarians on which measures actually matter. To overcome this current gap of unified indicators, the project team analyzed a variety of leading prosperity frameworks. Refer to Table 2.1 for example.

Table 2.1. Example “Prosperity” Models

Source	Factors Measured
City of Calgary Triple Bottom Policy	Economic; Environment; Social
Imagine Calgary	Built environment and infrastructure; Economic; Natural Environment; Social.
Sustainable Calgary	Community; Economic; Education; Natural Environment; Resource Use; Wellness.
United Nation’s Human Development Index	Life Expectancy; Expected Years of Schooling; Mean Years of Schooling; Gross National Income Per Capita
New Zealand Living Standard Framework	Social Capital; Human Capital; Natural Capital; Physical/ Financial Capital
Organisation for Economic Cooperation and Development Better Life Index	Housing; Income; Jobs, Community; Education; Environment; Civic Engagement; Health; Life Satisfaction; Safety; Work-Life Balance
World Happiness Report	Business & Economic; Citizen Engagement; Communications & Technology; Diversity; Education & Families; Emotions; Environment & Energy; Food & Shelter; Government and Politics; Law & Order; Health; Religion & Ethics; Transportation; Work
Economist Global Liveability Index	Stability; Healthcare, Culture; Environment; Education; Infrastructure
University of Waterloo’s Canadian Index of Wellbeing	Community Vitality , Democratic Engagement; Education; Environment; Healthy Populations; Leisure & Culture; Living Standards; Time Use
Human Prosperity Model	Physical, emotional, individual, social, intellectual, financial
Canadian Armed Forces Wellbeing Framework	Employment or Other Main Activity; Finances, Health; Life Skills and Preparedness; Social Integration; Housing/Physical Environment; and Cultural & Social Environment.

From the above frameworks, the *ActiveCITY* team chose the OECD *Better Life Index* and the New Zealand Government’s *Living Standards Framework* as baselines.³

Following community consultation, the Collective then developed a *community prosperity index* to act as a diagnostic tool to empirically evaluate the strengths and weaknesses of the community, while providing the ability to examine how the active economy impacts each dimension. This



community prosperity index incorporates four interdependent dimensions:

Economic Prosperity: This includes measures of economic activity at both an individual and community level.

Human Prosperity: This includes an individual’s real and perceived skills, knowledge, mental and physical health⁴ such as life expectancy, health, and wellness.

Social Prosperity: This is a multi-dimensional concept that examines the value of the collective community to an individual. Examples of measures include both behavioural (e.g. voting, volunteering) and perceptual (e.g. perceived trust, safety).⁵

Environmental Prosperity: This includes measures associated with the health and sustainability of a community’s natural resources with examples including air quality and waste management.

In Table 2.2, we provide a series of example community prosperity indicators across economic, human, social and environmental prosperity. This lack of harmonization on these indicators is a significant barrier to analyzing the impact of these investments on community priorities.

Table 2.2. Example Community Prosperity Indicators

Measures	Data Producer	Data Source
Economic Indicators		
Living Standards Indicators		
1. Percentage of labour force employed	Statistics Canada	Labour Force Survey ⁶
2. After tax median income of economic families	Statistics Canada	Census of Canada ⁷
3. Percentage of population that is moderately or severely food insecure	Statistics Canada	Canadian Community Health Survey ⁸
4. Percentage of labour force working less than 30 hours per week, not by choice	Statistics Canada	Labour Force Survey ⁹
5. Percentage of labour force with long-term unemployment	Statistics Canada	Labour Force Survey ¹⁰
6. CIBC index of employment quality (1994 QI=100)	CIBC	Canadian Employment Quality Index ¹¹
7. After tax median income of economic families	Statistics Canada	Census of Canada ¹²
8. Percentage of persons in low income	Statistics Canada	Survey of Labour and Income Dynamics and Canadian Income Survey ¹³
9. Shelter Consumption Affordability Ratio (SCAR)	Canadian Centre for Economic Analysis	Canadian Centre for Economic Analysis ¹⁴
10. Perceived of standard of living	Calgary Foundation	Vital Signs ¹⁵
11. Perceived ability to manage daily stress	Calgary Foundation	Vital Signs ¹⁶
12. Perception of economic outlook	Calgary Foundation	Vital Signs ¹⁷
Economic Indicators		
13. Gross domestic product	Statistics Canada	Calgary and Region Economic Outlook 2020-2025 ¹⁸
14. Oil & gas reliance index	Sustainable Calgary	State of Our City 2020 ¹⁹
15. New businesses formed	TBC	TBC
16. Building Permits	City of Calgary	Building Permits Issued per Year ²⁰
17. Housing Starts	Canadian Mortgage Housing Corporation	Calgary and Region Economic Outlook 2020-2025 ²¹
Human Indicators		
Health Indicators		
18. Life expectancy	Statistics Canada	Alberta Government Webpage ²²
19. Perception of physical health	Calgary Foundation	Vital Signs ²³
20. Perception of mental health	Calgary Foundation	Vital Signs ²⁴
21. Perceived sense of purpose	Calgary Foundation	Vital Signs ²⁵
22. Perceived self-efficacy	Sustainable Calgary	State of Our City 2020 ²⁶
23. Percentage of Canadians who report seven to nine hours of good quality essential sleep	Statistics Canada	General Social Survey: Time Use ²⁷
24. Population living near community activity centre	City of Calgary	One Calgary: 2019-2022 Service Plans and Budgets ²⁸
25. Physically active 150 minutes moderate to vigorous weekly	Centre for Active Living	Alberta Survey for Physical Activity ²⁹
26. Proportion of population obese	Centre for Active Living	Alberta Survey for Physical Activity ³⁰
27. Proportion of population overweight	Centre for Active Living	Alberta Survey for Physical Activity ³¹
28. Proportion of population dealing with mood disorder	Statistics Canada	Canadian Community Health Survey ³²
29. Suicide rate	Statistics Canada	Canadian Vital Statistics - Death database (CVSD) ³³
30. Percentage of population with an absence of health or activity limitations	Statistics Canada	Canadian Community Health Survey ³⁴
Personal Development Indicators		
31. Percentage of adults aged 25 or older who participate in education-related activities	Statistics Canada	Census of Canada ³⁵
32. Percentage of 20 to 24-year olds in population completing high school	Statistics Canada	Census of Canada ³⁶
33. Percentage of 25 to 64-year olds in population with a postsecondary credentials	Statistics Canada	Census of Canada ³⁷
34. Level-3 literacy	Sustainable Calgary	State of Our City 2020 ³⁸

Social Indicators

Social Vitality

35. Average daily amount of time spent with friends (minutes per day).	Statistics Canada	General Social Survey
36. Percentage of time spent on the previous day in social leisure activities	Statistics Canada	General Social Survey
37. Percentage of time spent on the previous day in arts and culture activities	Statistics Canada	General Social Survey
38. Average number of nights away on vacation trips in the past year to destinations 80 km from home	Statistics Canada	Travel Survey of Residents of Canada ³⁹
39. Perception of social isolation	Calgary Foundation	Vital Signs ⁴⁰
40. Perception Calgary is a great place for seniors to live	Calgary Foundation	Vital Signs ⁴¹
41. Perception Calgary is a great place to raise children	Calgary Foundation	Vital Signs ⁴²
42. Proportion proud to live in Calgary	City of Calgary	Citizen Satisfaction ⁴³
43. Perception of overall quality of life	City of Calgary	Citizen Satisfaction ⁴⁴
44. Perception Calgary is a great place to make a life	City of Calgary	Citizen Satisfaction ⁴⁵
45. Perception Calgary is a great place to make a living	City of Calgary	Citizen Satisfaction ⁴⁶
46. Perception Calgary is moving in the right direction to ensure a high quality of life for future generations	City of Calgary	Citizen Satisfaction ⁴⁷
47. The City of Calgary practices open and accessible government	City of Calgary	Citizen Satisfaction ⁴⁸

Community Engagement

48. Average number of hours in the past year volunteering for culture or recreation organizations	Statistics Canada	General Social Survey ⁴⁹
49. Proportion making charitable donations	Calgary Foundation	Vital Signs ⁵⁰
50. Community association membership	Sustainable Calgary	State of Our City 2020 ⁵¹

Inclusion

51. Perceived benefits of inclusivity	Calgary Foundation	Vital Signs ⁵²
52. Perceived trust in governments	Calgary Foundation	Vital Signs ⁵³
53. Confidence citizens have opportunity for meaningful input municipal decision-making.	City of Calgary	Citizen Satisfaction ⁵⁴
54. Representative public boards	No consistent reporting	Osler's 2019 Diversity Disclosure Practices ⁵⁵

Safety

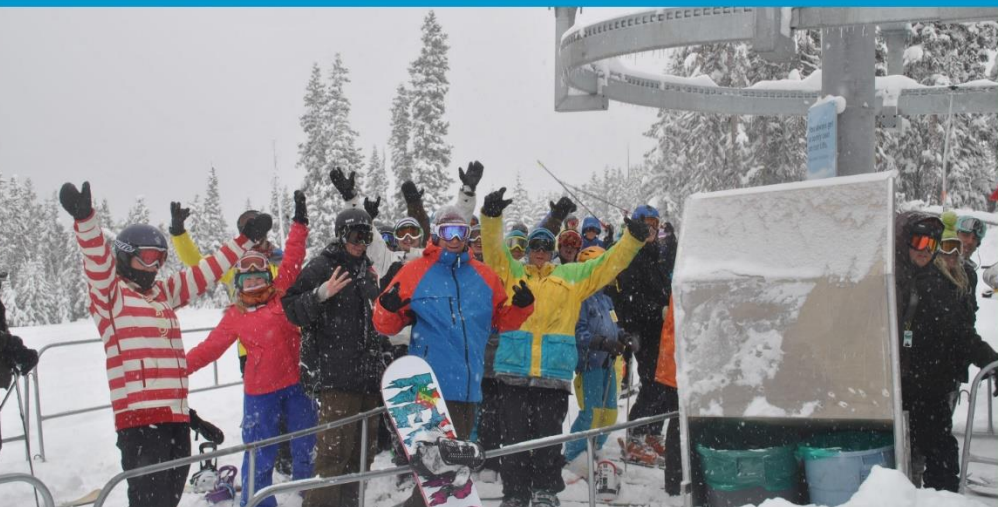
55. Proportion feeling safe in neighbourhood	City of Calgary	Citizen Satisfaction ⁵⁶
56. Proportion having a sense of community belonging	Calgary Foundation	Vital Signs ⁵⁷
57. Personal crime	Calgary Police Services	State of Our City 2020 ⁵⁸
58. Property crime	Calgary Police Services	State of Our City 2020 ⁵⁹

Natural Environmental Indicators

59. Primary access to transit network (within 400M)	City of Calgary	One Calgary: 2019-2022 Service Plans and Budgets ⁶⁰
60. Frequency of active transportation use	Calgary Foundation	Vital Signs ⁶¹
61. Perception of sustainability	Calgary Foundation	Vital Signs ⁶²
62. Proximity to parks and open spaces	Calgary Parks Foundation	One Calgary: 2019-2022 Service Plans and Budgets ⁶³
63. Reported air quality	Sustainable Calgary	State of Our City 2020 ⁶⁴
64. Litres per capita water consumption	Sustainable Calgary	State of Our City 2020 ⁶⁵
65. Ecological footprint	Sustainable Calgary	State of Our City 2020 ⁶⁶
66. Carbon footprint	Sustainable Calgary	State of Our City 2020 ⁶⁷
67. Per capita waste to landfill	City of Calgary	One Calgary: 2019-2022 Service Plans and Budgets ⁶⁸
68. Residential energy use per household (terajoules per 1,000 private dwelling)	Statistics Canada	Supply and Demand of Primary and Secondary Energy and Census of Canada ⁶⁹
69. Percentage urban forestry canopy	City of Calgary	One Calgary: 2019-2022 Service Plans and Budgets ⁷⁰

Indigenous Wellness Indicators⁷¹

Community Connections
 Natural Resource Security
 Cultural Use
 Education
 Self-Determination
 Resilience



3

THE REGIONAL ACTIVE ECONOMY

Today, the ability for a commercial, social, or public enterprise to succeed, is not simply about its internal resources and capability. Rather, it is dependent on the ecosystem in which it resides. Thus, the success of an individual enterprise, from a social recreation centre to a community garden to a health technology start-up is dependent on the overall health of the entire ecosystem.

Adopting the regional active economy view recognizes this interdependency by incorporating all enterprises who participate in, or contribute to, improving individual or community prosperity through the development and delivery of organized sport, active recreation and health and wellness experiences. By viewing the active economy as a complex ecosystem, the region will be better positioned to identify system-level opportunities.

In the following sections, this Playbook considers the active economy from four perspectives:

1. Sector
2. Occupation
3. Stakeholder
4. Value chain

SECTOR VIEW OF THE ACTIVE ECONOMY

The active economy incorporates eleven interdependent sectors in two macro-level clusters: delivery and enabling.

Delivery Cluster: This includes sectors responsible for the delivery of active experiences, including **active living**, organized sports, active recreation, **active tourism**, and **sport betting**.

Enabling Cluster: This includes sectors where the goods and service outputs support the delivery of the active experiences. Examples here are health and wellness, **active products and gear, equipment and accessories, design and infrastructure, media and content** and **professional services**. Refer to Table 3.1 for a breakdown of the eleven sectors.

To help us understand the size and scope of the active economy, Playbook 2030 leverages the North American Industry Classification System

(NAICS).⁷² There are three key outputs from the NAICS model:

1. Number of establishments
2. Number of paid employees
3. Aggregated number of establishments and paid employees

Our analysis identifies 95 of the 1,057 industry codes of NAICS that are fully or partially within the active economy. (Refer to Appendix 6 for the full list) Following the methodology adopted by the Nesta’s mapping of the United Kingdom’s **creative economy**, each of these codes were assigned an intensity factor reflecting the proportion of a specific industry linked to the active economy.⁷³ For example, if an industry has an intensity factor of 100 per cent (e.g. golf courses), all enterprises and employees are linked directly to the active economy. In contrast, if an industry has an intensity factor of one per cent (e.g. law offices), only one per cent of enterprises and employees from that are allocated to the active economy. Refer to Table 3.2 for the intensity allocation.

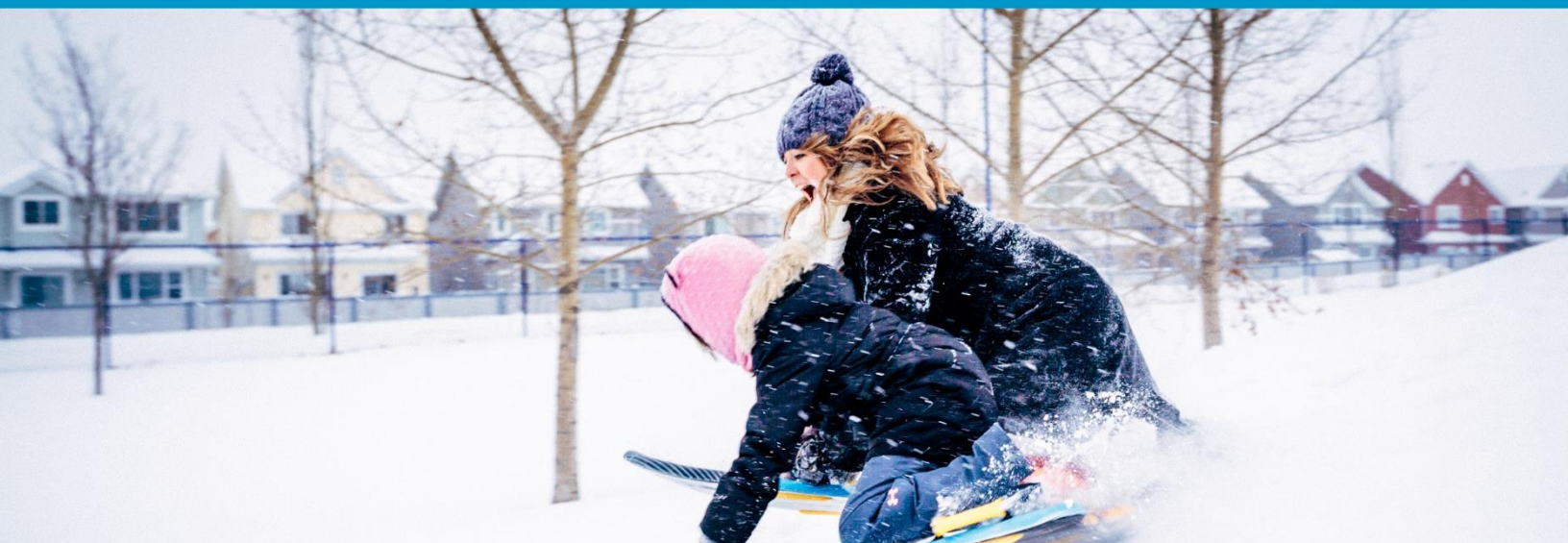
Table 3.1: The Eleven Sectors of an Active Economy

Delivery Cluster		
Active Living	<i>Active Living</i> incorporates unstructured activity and play as part of the daily living. Examples include active transportation, outdoor play, gardening, and proactive stair use. ⁷⁴	Cycling Walking Outdoor play Skateboarding
Organized Sports	<i>Organized sports</i> are activities involving physical exertion and skill as the primary focus of the activity, with elements of competition where rules and patterns of behaviour governing the activity exist formally through social, commercial, or public enterprises. Includes both amateur and professional sports.	Physical sports Motorized sports Coordination sports Animal-supported sports Sport leagues (Amateur and professional) Sport clubs and teams (Amateur and professional) Sport governing bodies Tournaments
Active Recreation	<i>Active recreation</i> are activities engaged in for the purpose of play, relaxation, health and wellbeing or enjoyment with the primary activity requiring physical exertion. They are often spontaneous in nature and participant led, with a low level of organization and limited structure.	Aerobics Jogging/ Running Hiking Recreational hockey Swimming Snowmobiling Horseback riding Tai Chi

Active Tourism	All tourism directly associated with active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	Tourism authorities Ecotourism Hosting major sporting or active recreation events Wellness tourism Tour companies Accommodation providers Transportation services
Sport Betting	Predicting organized sports results and placing a wager on the outcome.	Lottery and gaming authorities Casinos Fantasy sports Horse racing
Enabling Sectors		
Active Products & Gear	Development, manufacturing and sales of products and gear associated with active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors development or delivery.	Licensed apparel manufacturers Footwear manufacturers Sport and active recreation apparel retailers
Equipment & Accessories	Development, manufacturing, and sales of equipment associated with active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors development or delivery.	Fit-Tech Sport and active recreation retailers/ rentals Bike manufacturers Racquet sport manufacturers Golf manufacturers
Design & Infrastructure	All commercial, social, and public infrastructure required for delivering active transportation, organized sports, and active recreation experiences. Scope includes research, design, planning, construction, maintenance, repair, operation, and the supervision of infrastructure and open spaces.	Includes community level planning and design enabling active transportation including walking and cycling. Indoor examples include arenas, gymnasiums, Outdoor examples include stadiums, parks, playing fields, play-structures, additional civic infrastructure that supports the delivery of active transportation (e.g. Cycle tracks, sidewalks).
Health & Wellness	Health and wellness products and services supporting the delivery or engagement in organized sports or active recreation.	Traditional & complementary medicine Preventive & Personalized medicine and public health Healthy eating, nutrition, and weight loss Fitness and mind-body Workplace wellness Wellness real estate Policymakers associated with health and wellness
Media & Content	Media and content directly associated with active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	Broadcast rights holders Media enterprises and individuals who specialize in sport or active recreation. Sport and active recreation content developers Sponsors of sport and active recreation
Professional Services	Professional services directly associated with active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	Ticketing services Marketing agencies Sport advisory services Sport law

Table 3.2: Intensity Allocation

Intensity Scale	Definition	Sample NAICS
100 per cent	Estimated that 100 per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors of the active economy.	711217 - Sports teams and clubs performing before a paying audience 711319 - Sports stadiums and other presenters with facilities 712190 - Nature parks and other similar institutions 451111 - Golf equipment and supplies specialty stores
30 per cent	Estimated that 30 per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors of the active economy. ⁷⁵	611110 - Elementary and secondary schools 446191 - Food (health) supplement stores 515110 - Radio broadcasting 515120 - Television broadcasting
10 per cent	Estimated that ten per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors of the active economy. ⁷⁶	414110 - Clothing and clothing accessories wholesaler-distributors 448210 - Shoe stores 621510 - Medical and diagnostic laboratories 621390 - Offices of all other health practitioners
1 per cent	Sector provides enabling support services to one or more of the eleven sectors of the active economy. The minimum default is one per cent of the activity is allocated to the active economy.	541310 - Architectural services 541320 - Landscape architectural services 541330 - Engineering services



AN OCCUPATION VIEW OF THE ACTIVE ECONOMY

Following the Nesta creative economy methodology, a sector level view is recognized as insufficient. This is because it excludes individuals who are in active economy occupations outside of a typical active economy enterprise (e.g. Wellness Manager for an oil and gas company). To better understand these instances, the project team used the National Occupational Classification (NOC) which is a systematic classification of all occupations in Canada.⁷⁷ An occupation is defined as a collection of jobs, sufficiently similar in work performed to be grouped under a common label. A job, in turn, encompasses all the tasks carried out by a particular worker to complete their duties. Using these definitions, the 2016 NOC resulted in approximately 35,000 titles classified into 500-unit groups.⁷⁸

The research team then audited all 500-unit groups and 35,000 job titles to identify active economy occupations. In total, 72 of the 500-unit groups (14.2 per cent) included active economy occupations. This translated into thousands of job titles. In some codes (e.g. athletes) 100 per cent were included in the active economy. In contrast, others (e.g. Retail and wholesale trade managers) had only a fraction of the job titles linked to the active economy.

A challenge of the NOC is that it offers only limited ability to disaggregate the occupation data at the community level. For privacy reasons, Statistics Canada does not provide NOC data below 1,500 counts. As a result, it was impossible to consistently apply NOC data in the Playbook as many of the local active economy occupations are below this threshold. As a result, active economy occupations in non-active economy enterprises are excluded from our model. Thus, the estimated employee count and associated economic contribution are considered very conservative.



A STAKEHOLDER VIEW OF THE ACTIVE ECONOMY

Another important dimension of mapping an active economy is identifying the different roles of each stakeholder. Playbook 2030 defines an active economy stakeholder as any individual or enterprise that has an interest in, or is impacted by, the active economy. This includes all forms of engagement in the active economy which can either be in a professional or volunteer capacity.

The Playbook classifies the active economy stakeholders in five distinct roles:

- Participant
- Administrator
- Enabler
- Policymaker
- Supporter

An important recognition in this approach was that a single individual can play different and/or multiple roles. Refer to Table 3.3 for definitions and examples of each stakeholder in the active economy.

Table 3.3. Active Economy Stakeholders

Role	Definition	Examples
Participant	One that partakes in active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	Participating in a dance class, cycling to work, playing on a recreational soccer team, hiking, and high-performance athletes.
Administrator	One whose role supports the development and/or delivery of active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	League coordinator, recreation centre facility manager, recreation program coordinator, promotion or sales coordinator for a local team, role on a sport governing body.
Enabler	One whose role enables others to participate in active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors. Enablers may be volunteer or professional.	Coach, referee, personal trainer, early childhood educators, physiotherapist, physical education teacher, eco-tourism guide, designer of sport equipment, lifeguard, urban planner, sponsor, granting body.
Policymaker	One who is a member of a government department, legislature, or other enterprise who is responsible for developing and implementing active economy policy, including in active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors.	Minister responsible for sport, physical activity and recreation, municipal councilor, director of parks & recreation.
Supporter	One who supports or motivates others to participate in active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors experiences.	A parent who registers their child in a program, a spectator who attends a live sporting event, a fan who watches an organized sporting event on television, playing in a fantasy sports league.

A VALUE CHAIN VIEW OF THE ACTIVE ECONOMY

The ecosystem view recognizes that value is generated not only by individual enterprises but also by the way in which these enterprises interact to create incremental value. To understand the systematic value of the active economy, it is essential to disaggregate the ecosystem into discrete, but interdependent building blocks. Together, these building blocks form what the Playbook defines as *the community value chain*.

The interconnections and relationships between the enterprises, individuals and activities in each building block can then take many forms. In Figure 3.1, the Playbook proposes a conceptual diagram of the active economy value chain incorporating three major building blocks: (1) community input resources; (2) activities; and (3) outputs.⁷⁹ Section 4 includes a comprehensive audit of each building block.

COMMUNITY INPUT RESOURCES

Community input resources are the essential enablers of the active economy. The development of enterprises in the ecosystem and their activities are dependent on a combination of five community input resources:

1. Human
2. Economic
3. Social
4. Natural
5. Built

Therefore, the ultimate impact of the active economy on community prosperity can be mapping back to the interaction of these five resources. Calgary's regional community input resources are explored in Section 4.

ACTIVITIES

Activities make up the enterprises and production processes that incorporate a combination of two or more community input resources. For example, it may take human resources (e.g. skills and experience), economic resources (e.g. funding) and built resources (e.g. skateboard park) to develop and operate a program that offers free skateboard lessons for youth at risk. The activities

of Calgary's regional activities economy are considered in Section 5.

OUTPUTS

Outputs are the tangible and intangible products, services or experiences generated by the active economy enterprises and their processes. For example, outputs generated by the above-mentioned skateboard program may range from new friends to new experiences. The outputs of Calgary's regional active economy are considered in Section 5.

SUMMARY

Calgary's regional active economy provides an integrated lens on the systematic value of active living, sport, recreation, physical education, physical literacy, indoor and outdoor play, health, wellness, and all other associated sectors. to a community. The scope and the value generated by the interaction of the building blocks that form the community value chain is vast. In the following two sections, Playbook 2030 includes a comprehensive audit of these three building blocks of Calgary's regional active economy and their systematic contribution to community prosperity.

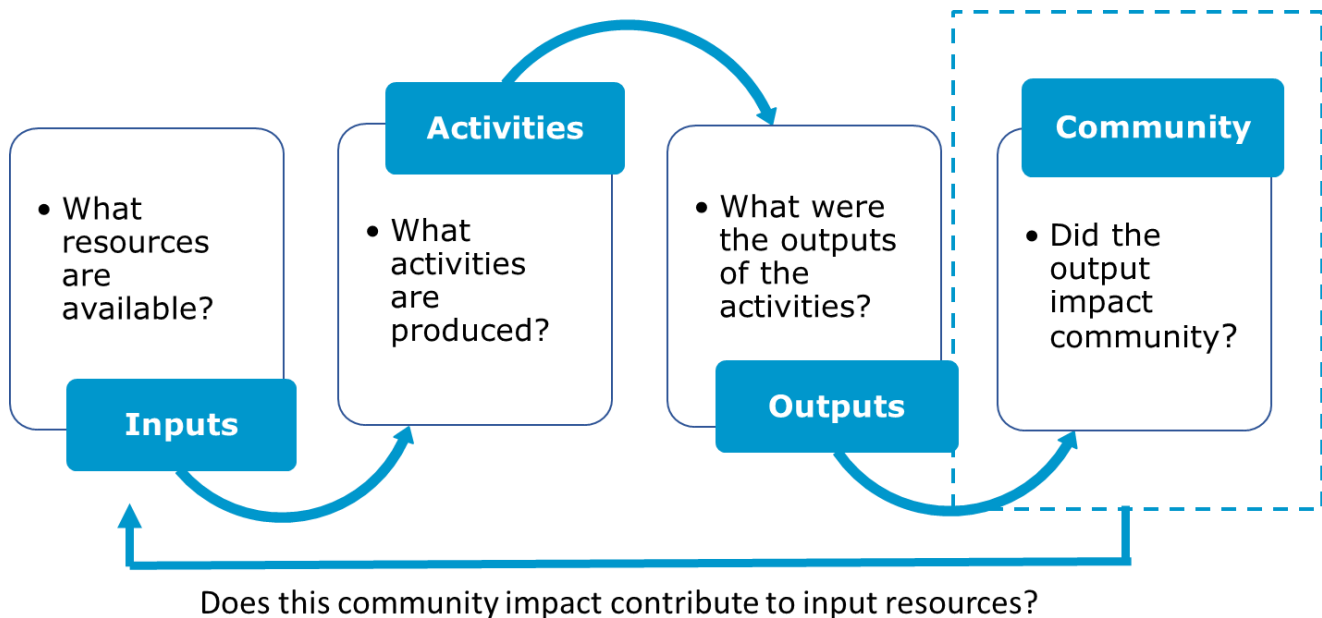


Figure 3.1: Community Value Chain



4

COMMUNITY INPUT RESOURCE AUDIT

Community input resources are the essential enablers of a community's active economy. The active ecosystem is dependent on five community input resources:

1. Human
2. Economic
3. Social
4. Natural
5. Built

In the following section, the Playbook reviews an audit of each community input resource categories.

HUMAN RESOURCES AUDIT

HIGHLIGHTS

Growth: Population of 1.35 million, including an increase of 220,000 in the past decade.⁸⁰

Ethnic Diversity: 33.7 per cent of Calgary's population are from a visible minority, making it the third most ethnically diverse city in Canada. Toronto is the most diverse at 51.4 per cent.⁸¹

Aging: The median age in Calgary is 37.2 years, making it the fourth-youngest city in Canada. Saskatoon is the youngest at 35.8.⁸² However, like the rest of Canada, the city is aging as the baby-boom generation retires. The population of 65+ increased by 12 per cent over the past decade. The population between the ages of 20-24 decreased by six per cent.

Education: Calgary possesses one of the highest education attainment levels in Canada. At 27 per cent, Calgary possesses the highest proportion of STEM graduates of major Canadian cities, with a high concentration in geo-sciences and related areas.⁸³

Capacity Building: Calgary has 32 postsecondary programs directly contributing to the capacity of the active economy. There are also numerous professional development training providers, such as the Banff Centre.

Health: 60 per cent of Albertans are classified as overweight or obese with 64 per cent of Albertans meeting the Canadian physical activity guidelines. Only one in 20 youth ages 12-17 achieve the minimum physical activity levels.



A DIVERSE CITY

Calgary's population is becoming increasingly diverse, and this is forecasted to accelerate over the next decade.

New Canadians: One of the ways in which Calgary is changing is through immigration. As per Figure 4.1⁸⁴ and 4.2⁸⁵, in the 1980s, Calgary would average 20,000 new Canadians per five-year period but between 2011-16, Calgary welcomed over 95,000 new Canadians. What requires further examination is knowing where the immigration originates and how this may impact the active economy moving forward.

We also need to acknowledge the gender diversity within new Canadians. Statistics Canada for instance reported that 72 per cent of foreign-born men (over the age of 15 years) and 61 per cent of Canadian-born men participated in sports regularly. These numbers are inverted for women.⁸⁶



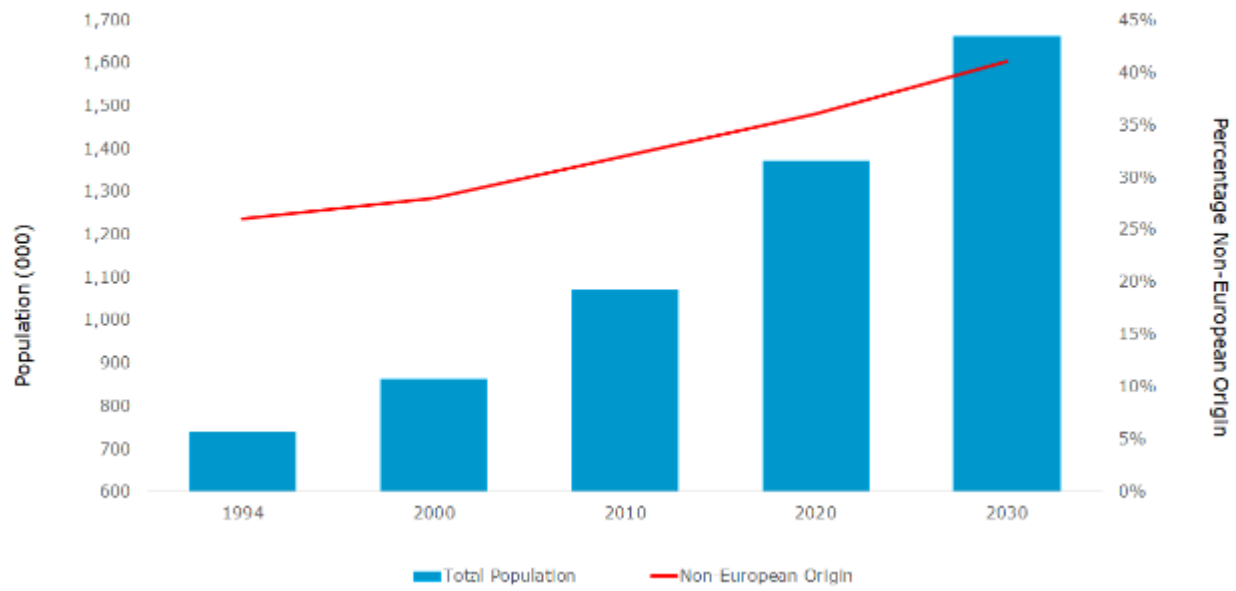


Figure 4.1: Growing and Change Face of Calgary¹

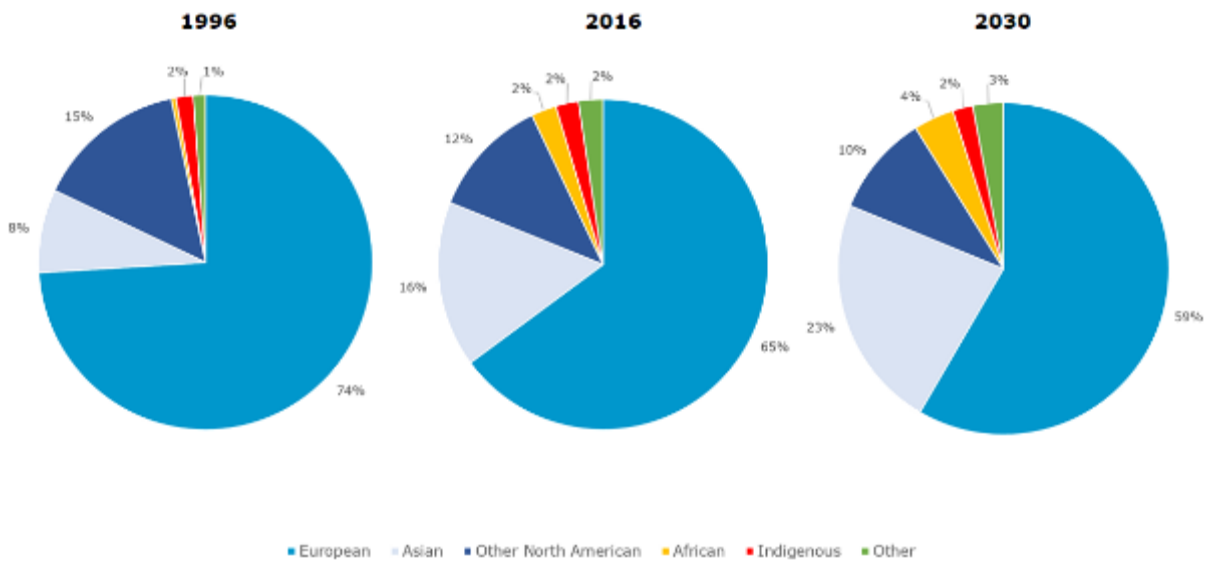


Figure 4.2: Calgary Ethnicity¹

Impacts of Colonization

Indigenous people in Canada have continuously been marginalized in economic participation due to an unequal relationship with many levels of government. Many First Nations communities are looking to engage and be a part of the economy while overcoming this dependency.

First, to move forward with economic development within Indigenous communities, both government and communities have to work together to increase capacity and foster an environment of entrepreneurial growth and business opportunities. Second, governments and businesses engaged with communities, as well as local entrepreneurs, must embrace the concept of generational sustainability for community prosperity. This concept is one that looks at the future of the community for generations to come, such as the "Seven Generations Philosophy".

For over a century, the central goals of Canada's Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious and racial entities in Canada. The establishment and operation of residential schools were a central element of this policy, which can best be described as "cultural genocide." One of the legacies of colonialism is forced relocation to reserve lands and the lack of access and control many Indigenous communities have over resources, which limits opportunities for economic development in those communities. This is complicated by the failure of governments to fulfil their treaty obligations creating an environment of uncertainty that may prevent external organizations from engaging in economic development initiatives with Indigenous communities.

As stated above, First Nation resources are limited but with the right support these limits can be reduced. Moreover, Canada's Truth and Reconciliation Commission is accelerating a call for increasing support and recognition of Indigenous communities but there is a great deal of work needed. For example, in a 2020 study, Canadian women who self-identify as Indigenous reported the lowest levels of participation in sport and recreation in a survey of all women.⁸⁷

Indigenous Peoples: In 2011, there were 28,905 people identifying as Indigenous living in Calgary, representing 2.7 per cent of the total population. This has grown significantly in the last 9 years and Calgary's Indigenous population is young with a median age of 28.⁸⁸

Sports and physical activity have always been an important part of Indigenous culture and ways of life. "Before Europeans settled in North America, Indigenous people received their education by learning how to survive on the land, and physical games and contests were central to this training[participation] in a variety of games to develop strength, speed, flexibility, and endurance. Traditional sports and games were also key sites for reinforcing social, political, economic, and spiritual aspects of life...Lacrosse was a means by which to cement social ties, physically prepare men for war, engage in economic relations, connect with the spiritual world, and have fun.

All physical activities were crucial for maintaining their practitioners' unique cultural identities and connections to the land while ensuring basic survival."⁸⁹ However, since colonization, many of those traditional ways have been eroded, and indigenous peoples have often been systemically excluded and discriminated against participating in mainstream sport and physical activity opportunities.

Seniors: Another specific population that requires further understanding are older adults. For the first time in Canadian history seniors (65+) are a bigger cohort than children (< 12 years). By 2032, one in four Canadians will be a senior⁹⁰ and people over the age of 100 are actually the fastest-growing demographic group in Canada. Calgary's population is predicted to grow over the next decade by an average of 1.71 per cent in total while the forecasted growth rate for seniors is 4.71 per cent (Refer to Figure 4.3).⁹¹



Figure 4.3: The Age Shift

This shifting population has systemic implications on Calgary’s regional active economy in areas such as recreation, wellness programming, and equipment. Currently, only 50 per cent of seniors report achieving the minimum-level of physical activity, the lowest of any age cohort.⁹² As life expectancy continues to rise, the active economy must understand the needs of this cohort.⁹³

Finally, *ActiveCITY* must work to understand the wants, needs and **barriers** of each person in the community, with an emphasis on those communities who have a much lower level of engagement compared to others. This includes young girls and women, LGBTQI2S+, lower income households and people with disabilities, among others.



A HEALTHY CITY

There are many metrics by which to measure health. For example, today 60 per cent of Albertans are classified as overweight or obese.⁹⁴

Another example is levels of activity and while an estimated 64 per cent of Albertans meet the Canadian physical activity guidelines,⁹⁵ yet for youth ages 12-17, only one in 20 are getting the minimum level of physical activity.⁹⁶ Figure 4.4 is a comparison on physical activity trends between Calgary and Edmonton.⁹⁷ Evidence shows education and income are highly correlated to physical activity (Refer to Figure 4.5⁹⁸). Lack of

physical activity is also increasing levels of heart disease, diabetes, blood clots, cancers and other weight-related health problems are putting enormous strain on an already fragile healthcare system.

Mental health is another aspect where the active economy plays an important role. Mental health refers to overall prosperity including life satisfaction, happiness, productivity and involvement, and the ability to manage stress. According to the World Health Organization (WHO) there is no health without mental health.⁹⁹ To give a snapshot of the need for mental health interventions, more than 300 million people have depression worldwide, which is an increase of 18 per cent between 2005 and 2015.¹⁰⁰ Figure 4.6, compares perceived work stress, physical health, and mental health across Canadian cities. Overall, Calgary ranked well compared to other Canadian cities, but we cannot take this for granted.¹⁰¹

“More than 300 million people have depression worldwide, which is an increase of 18 per cent between 2005 and 2015.”

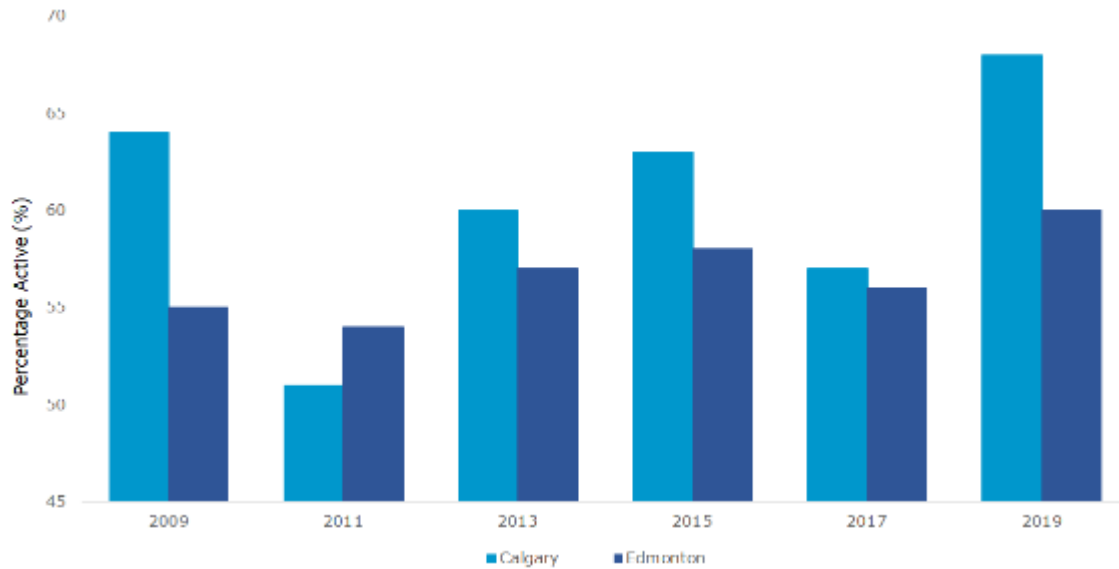


Figure 4.4: Per cent Sufficiently Active

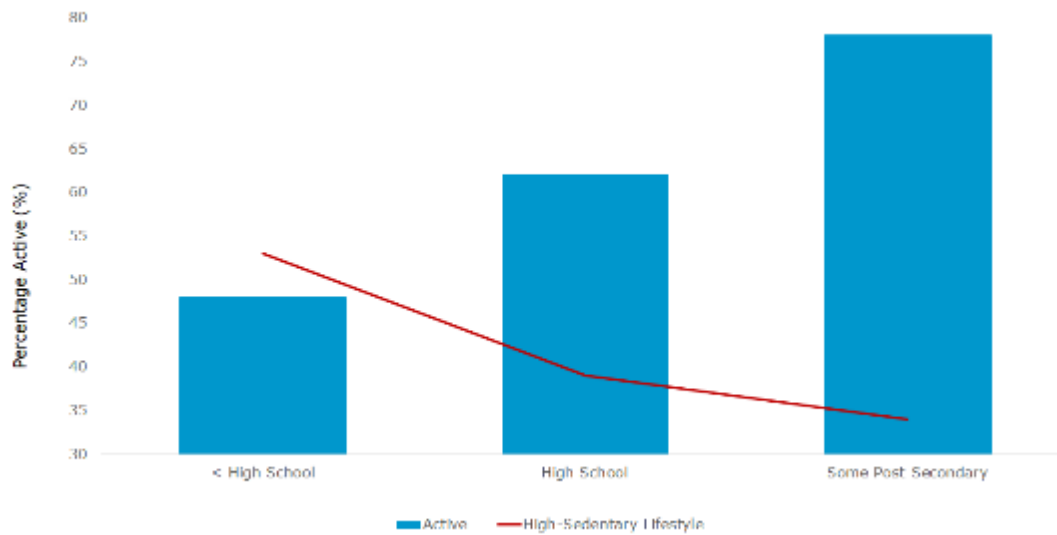


Figure 4.5: Per cent Active & Sedentary by Education

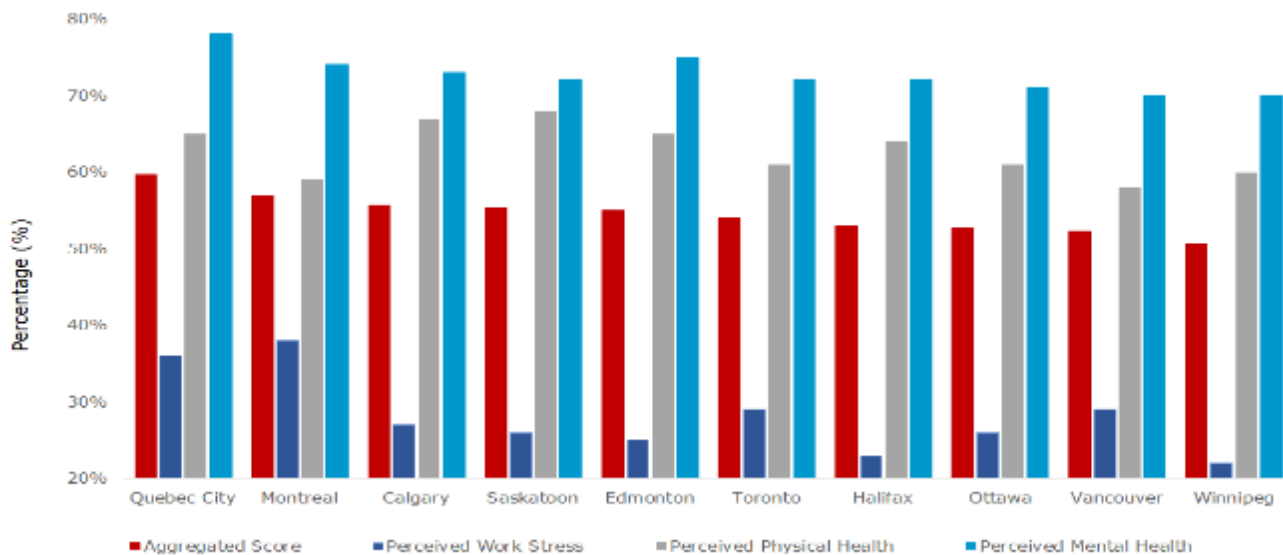


Figure 4.6: Perceptions of Stress and Health by City



AN EDUCATED CITY

Over the past two decades, Calgary has seen a significant increase in both people completing bachelor's and master's degrees, ranking second in Canada as a proportion of population.¹⁰² Currently, there are over 91,000 postsecondary students enrolled in programs.¹⁰³ Finally, at 27 per cent, Calgary possesses the highest proportion of STEM graduates of major Canadian cities, with a high concentration in geo-sciences and related areas.¹⁰⁴

An educated city provides a strong foundation for developing the capacity of the active economy. However, it is also important to examine the specific programs that are linked directly to developing competencies related to developing the active economy. Today, there are 32 different accredited educational programs designed to develop the capacity of the active economy. Refer to Appendix 7 for a list by institutions of programs related to developing specific competencies associated with the active economy.¹⁰⁵ These programs, ranging from management to engineering to health and wellness, are highly fragmented with little guidance of how someone may build a career in the active economy. With the exceptions of structured professional-oriented programs (e.g. physical therapy), individuals are required to chart their own pathway of formal education, work experiences and networking to

build their career. Not surprisingly, research suggests that many exit the active economy at an early career stage. Reasons for exiting are tied to compensation, irregular hours, and a lack of clear pathways to grow professionally.¹⁰⁶

IMPLICATIONS FOR PLAYBOOK

Calgary has undergone seismic changes in the past two decades related to the themes just discussed. Calgary is one of the most ethnically diverse cities in the country. Moreover, like other cities, the region faces the challenge of an aging population. These two trends have led to a significant increase in the human capital available to the city. However, the potential of this human capital is being under-leveraged for many reasons. Rather, it would appear that the active economy talent is largely developed ad hoc or imported from other jurisdictions.

As a result, there are several implications. First is the need to build infrastructure reflecting the needs of this diversifying population.¹⁰⁷ Second, is the need to recognize how changing demographics impact program design across all dimensions of the active economy. A third imperative is the need to align education and development with emerging growth areas and those that are already or could be involved within the active economy. These will be addressed in subsequent chapters with regards to more specific proposed actions.

ECONOMIC RESOURCES AUDIT

HIGHLIGHTS

Head Offices: There are more corporate head offices in Calgary per capita than any other Canadian city.¹⁰⁸ Examples of local Head Offices associated with the active economy include Sport Chek, Hockey Canada, and Resorts of the Canadian Rockies.

Labour Force: At 74.2 per cent (2019) Calgary has the highest labour force productivity and labour force participation of major Canadian cities.¹⁰⁹ However, the five-year growth rate is .03 per cent and its 12-month rate is -6.7 per cent.

Income: As per Figure 4.7, Calgary has the highest per capita income in the country and the lowest percentage of low-income households of any major city in Canada.¹¹⁰

High Unemployment: In 2019, Calgary had the highest **unemployment rate** of Canada's six largest cities. In 2019, Calgary's unemployment rate was 7.2 per cent compared with a national rate of 5.6 per cent.¹¹¹ As per Figure 4.8, even prior to COVID-19, high unemployment was forecasted to continue for the next half decade.¹¹²

Energy Sector Dependent: The primary sector industries and utilities contribute about \$36 billion (28.4 per cent) of Calgary's GDP and Calgary's oil and gas reliance (OGR) index stood at 34.9.¹¹³ The value of oil and gas exports in 2019 was \$80.2 billion – 71 per cent of all merchandise exports.¹¹⁴ Of the top five export markets, the US alone represents 92 per cent of total export value.¹¹⁵

Technology Centre: Calgary has the highest concentration of high-tech workers of Canadian cities.¹¹⁶ Calgary ranked 1st in research and development business cost competitiveness relative to peers.¹¹⁷

Entrepreneurial: Calgary has the second highest number per capita of small businesses and self-employed individuals in Canada. Refer to Figure 4.9.¹¹⁸

Income Inequality: Calgary has the highest median income in Canada and lowest proportion of low-income earners. However, in 2017 the ratio of Alberta's top 20 per cent of earners to the bottom 20 per cent was 26 to 1. For the past five

years, Calgary has also seen a consistent increase in demand for food bank hampers. In 2019, over 200,000 recipients received hampers, compared to 150,000 in 2014.¹¹⁹

ECONOMIC STAGNATION



The changing demands on the crude oil market will have long-term implications on Calgary's energy sector and economy as a whole. The City of Calgary as part of their 2020-25 Economic

Outlook has mapped a series of risk scenarios that consider this dynamic environment.¹²⁰ In the 2020-25 Outlook they state:

There is extreme uncertainty around Calgary's economic outlook for the next five years. The length of a demand shock on the crude oil market will have a long-term impact on Calgary's energy sector. The longer the demand shock, the greater the damage to Calgary's energy-related firms and jobs.¹²¹

The oil and gas sector, representing more than a quarter (27.9 per cent) of Alberta's gross domestic product is experiencing significant structural disruption.¹²² However, this does not necessarily or accurately reflect the real impact of an unstable oil and gas sector. As Statistics Canada notes, "for each dollar in lost GDP in the oil and gas industry, \$1.14 is lost in other industries due to indirect (\$0.77) and induced (\$0.37) impacts. For each job lost in the oil and gas industry, six jobs are lost in other industries (4 through indirect effects and two through induced effects)."¹²³ Recognizing the need for diversification, in June 2018, Calgary City Council unanimously approved a new economic strategy for the city, facilitated by Calgary Economic Development. Titled, *Calgary in the New Economy*. This strategy called for a diversification of the economy.

A difficulty in achieving this is Calgary's historical roots in the energy sector. For example, 25 per cent of Calgary's technical expertise is comprised of software engineers and data scientists, compared with 50 to 62 per cent in Ottawa, Vancouver, Montreal, and Toronto.¹²⁴ Further, in a recent survey of global oil and gas CEOs by PwC,

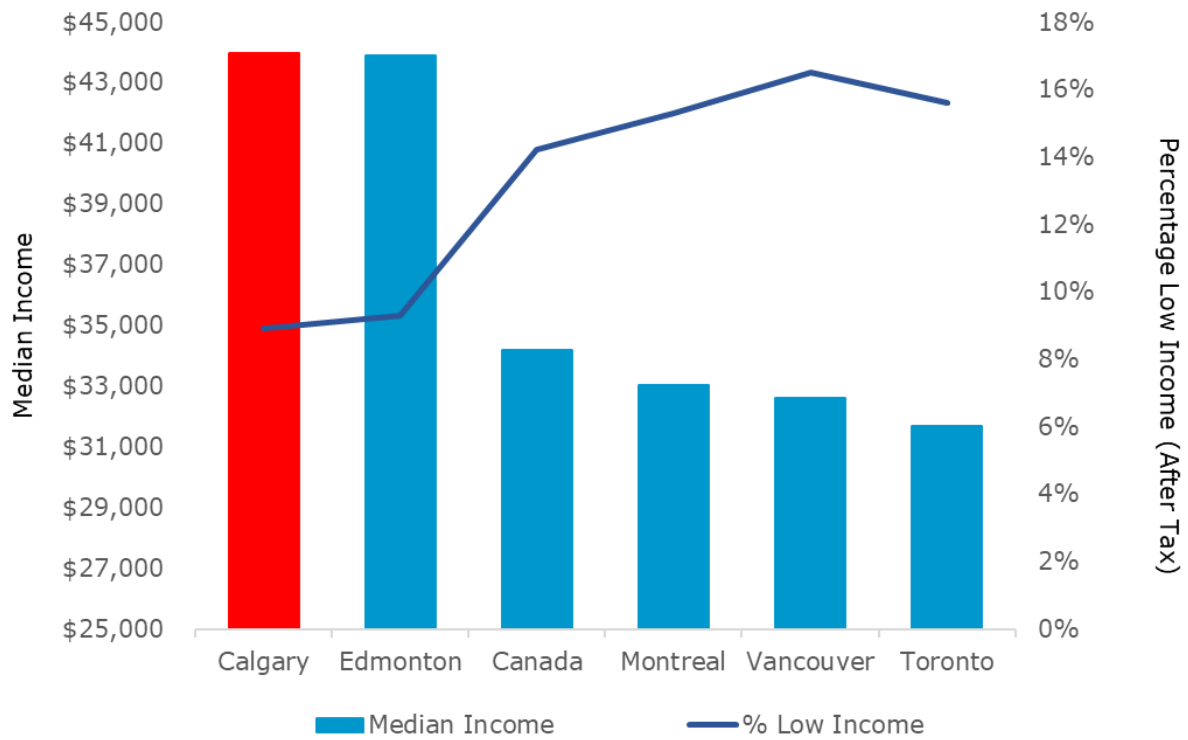


Figure 4.7: Median and Low Income by Major Cities

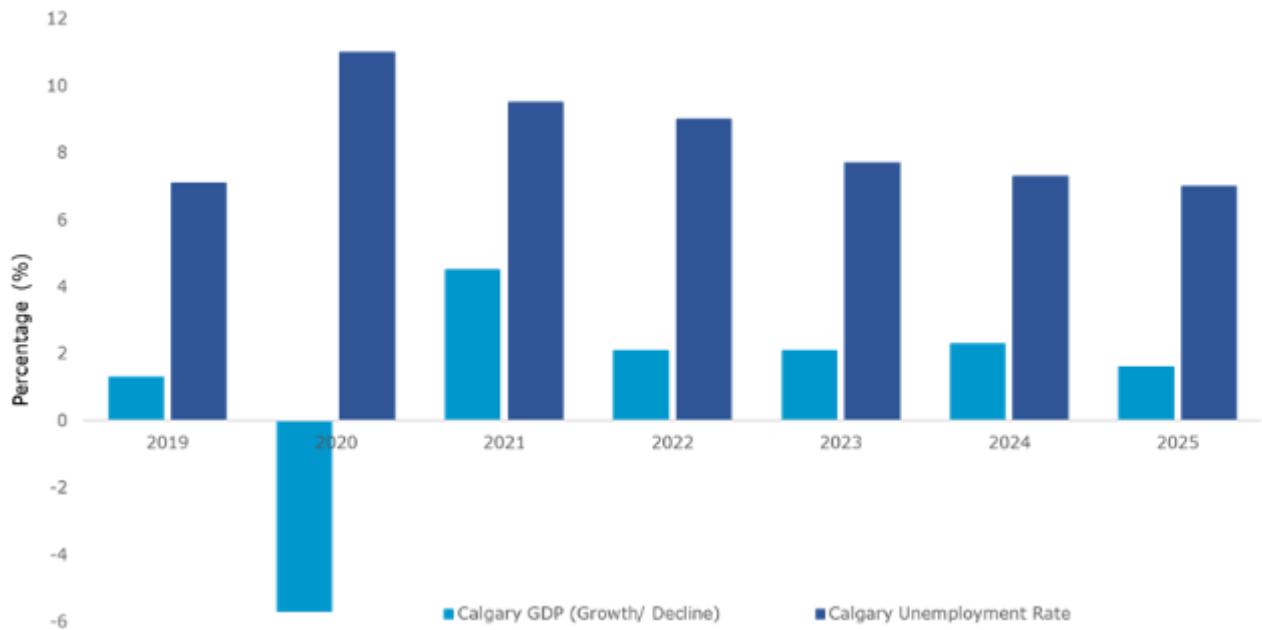


Figure 4.8: Calgary GDP and Unemployment Forecast (2020-25)¹

68 per cent of the leaders are concerned about talent availability to support their company's digital transformation strategies; so there will be increasing competition for these types of individuals.¹²⁵ As a result, Calgary is forecasted to have a significant skill gap over the next decade.

Calgary has also been characterized as possessing an entrepreneurial **culture**. Evidence supports this with Calgary having the second highest number per capita of small businesses and self-employed individuals in Canada (Refer to Figure 4.9). Leveraging this entrepreneurial culture will be essential for growth of the active economy.

PRIVATE SECTOR

The active economy is dominated by the private sector. In fact, upwards of 90 per cent of the nearly 4,000 active economy enterprises in Calgary's regional active economy are from the private sector (both commercial and social). This includes enterprises ranging from retail to physiotherapy clinics to recreation centres. For this reason, it is important to note that the annual private sector operational investment in Calgary's regional active economy (inclusive of salaries, facility leasing etc.) far exceeds all public sector investment. Lastly, Calgary leads the country in consumer expenditures in sport and recreation at \$3.15 billion annually.¹²⁶ These active economy investments anchor the growth of the Calgary regional active economy.

PUBLIC INVESTMENT



Federal, provincial, and municipal government investment in Calgary's regional active economy occurs through a multitude of ministries and agencies including sport, recreation, health, environment, education, economic development, tourism, and lotteries.

MUNICIPAL INVESTMENT

The city of Calgary is facing significant financial pressures due to a dependency on non-residential property taxes. The stagnant economy and significant downtown commercial vacancy rates have resulted in the city attempting to rebalance the property tax burden both geographically and between non-residential and residential sources. As of fall 2019, the City's financial projections were stable with sufficient flexibility on its debt limit. However, the financial implications of COVID-19 are in its infancy and act as a significant constraint on municipal investment and programs associated with the active economy.

Pre COVID, there were 4.3 million annual visits to City run recreation facilities, with 80,000 Calgarians using the fee assistance program. The 2018 gross operating budget was \$101 million with \$51 million being funded through taxes. This included \$48 million to aquatic and fitness facilities, \$23 million to arenas and athletic parks and \$12 million to golf.¹²⁷

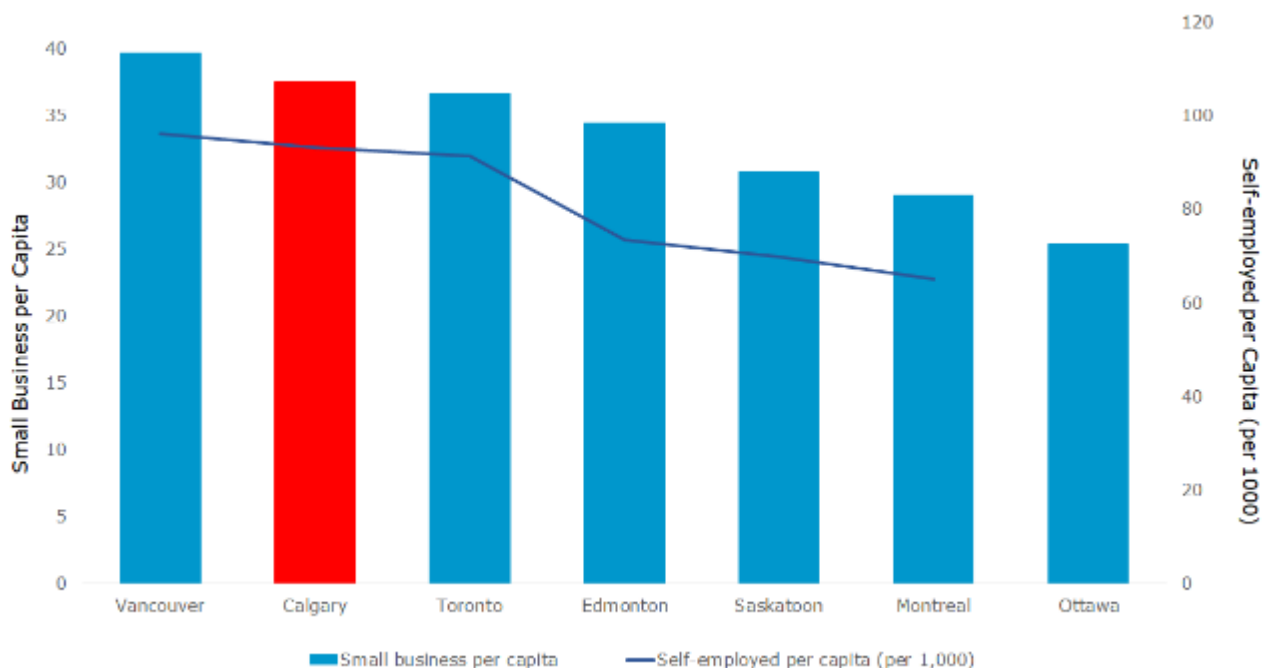


Figure 4.9: Small Business and Self-Employed Per Capita by Major Cities

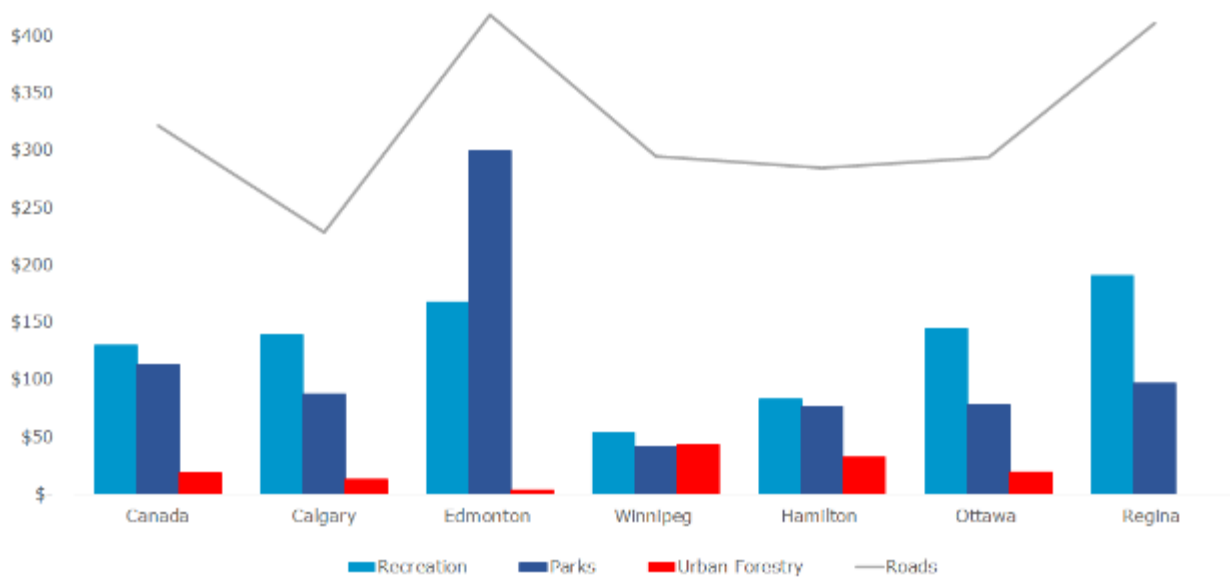


Figure 4.10: Per Capita OPEX and CAPEX in Most Current Budget

Table 4.1 breaks down many of the areas of regional active economy investments and investments in roads.¹²⁸

Table 4.1: City of Calgary Active Economy Investment

Department	Initiative	3yr Average ¹²⁹	Per Capita
Recreation	Operating	\$50M	\$38.46
Recreation	Capital	\$94M (19-22)	\$72.30
Recreation	Partner Grants	\$3.4M	\$2.62
Parks	Operating	\$72.5M	\$55.77
Parks	Capital	\$101M (19-22)	\$77.69
Urban Forestry	Operating	\$14.9M	\$11.46
Urban Forestry	Capital	\$3M (19-22)	\$2.31
Sidewalk & Pathways	Operating	\$47.4M	\$37.70
Sidewalk & Pathways	Capital	\$132M (19-22)	\$101.53
Roads	Operating	\$138M	\$101.54
Roads	Capital	\$701M (19-22)	\$539.23

From the grants listed above, the City of Calgary allocated \$146.01 per capita to the active economy for annual operations, inclusive of organized sports, active recreation, parks, and urban forestry. For perspective, Calgary allocated five times the amount of capital on roads than sidewalks and pathways.

When comparing municipal related active economy expenditures across categories in Figure 4.10, Calgary is positioned at roughly the national average on combined operating expenses (OPEX) and capital expenditures (CAPEX) on an annualized per capita basis.¹³⁰ It is important to note that comparison of municipal expenditures is difficult to ascertain as departmental scope, definitions and budgets are highly inconsistent. Therefore, comparisons should be considered only directional.

PROVINCIAL INVESTMENT



Direct provincial support and investment in Calgary’s regional active economy happens in several ways. First, the Community Facility Enhancement Program (CFEP) provides financial assistance to acquire, build, purchase, repair, renovate, upgrade, or expand sports, recreational, cultural, or other related public-use community facilities. Second, the Community Initiatives Program (CIP)/ Major Cultural and Sport Events (MCSE) streamlines investment processes and maximizes limited investment for organizations applying through multiple sources within the Ministry of Alberta Culture, Multiculturalism and Status of Women. Areas of focus here include sport, physical activity, recreation, and tourism. The Community Initiatives Program (CIP)/ operating grant supports core operations and capacity

building for social enterprises whose mission, outcomes, and services make an impact on the social community prosperity.¹³¹

Additional provincial programs include:¹³²

- Healthcare funding through Alberta Health Services.
- Association Development Grant Program that provides funding to a wide range of provincial sport organizations to deliver sporting opportunities to Albertans.
- Coaches and Officials Initiatives Program offering grants that support the long-term development of coaches, officials, and provincial sport organizations.
- Physical activity and recreation grants providing social enterprises funding from operating and project streams.
- Podium Alberta provides funding to Alberta's high-performance athletes to help cover costs related to training, equipment and living costs.
- Travel Alberta's 2020-21 budget supports tourism in Alberta with \$37.7 million.¹³³
- Provincial funding to all levels of education.

FEDERAL INVESTMENT

The Government of Canada also provides support for the active economy through a variety of mechanisms. For example, Canadian Heritage Ministry assists athletes and national organizations that make up the high-performance sport system through Sport Canada programs and policies. Sport Canada then provides investment to support early stage to **high-performance sport** experiences.

"the federal government is providing \$11.8 billion in federal infrastructure investment to cost-share projects in a variety of areas including green infrastructure and community, culture, and recreation."

Sport Canada programs support the sport system at the national level, provide financial assistance to high-performance athletes, advance the objectives of the Canadian Sport Policy, and help Canadian organizations host sport events that create opportunities for Canadians to compete at the national and international level.

The Athlete Assistance Program (AAP) contributes to improved Canadian athlete performances at major international sporting events, enabling athletes to combine their sport and academic or working careers while training intensively in pursuit of world-class performances. Approximately \$33 million in funding goes directly to around 1,900 athletes.¹³⁴

The Hosting Program invests roughly \$21 million to enhance the development of sport excellence and the international profile of sport organizations by assisting sport organizations to host the Canada Games and international sport events in Canada.

The Sport Support Program (SSP) is aimed at developing athletes and coaches at the highest international levels; providing technically based sport programming for all athletes; increasing the number of Canadians from all segments of society involved in sport, and advancing Canadian interests and values in Canada and abroad. An estimated \$64 million is provided as enhanced excellence funding for targeted sports and athletes with medal potential at the Olympic and Paralympic Games. An additional \$5 million is provided to support the next generation of Olympic and Paralympic athletes.



Moreover, the Investing in Canada Infrastructure Program (ICIP) is a federal program designed to create long-term economic growth; build inclusive, sustainable, and resilient communities; and support a **low-carbon economy**. Through the ICIP, the federal government is providing \$11.8 billion in federal infrastructure investment to cost-share projects in a variety of areas including **green infrastructure** and community, culture, and recreation. Alberta is receiving \$140.6 million for community, culture, and recreation projects over the next 10 years (2018-28). An example of this was the \$6,029,368 investment to the YWCA and the \$15 million for the VIVO expansion.¹³⁵ As a further example of how the three levels of government work together to provide infrastructure investment, for VIVO, \$15 million came from the Government of Canada, \$15 million from the Government of Alberta, and \$22.5 million from the City of Calgary.

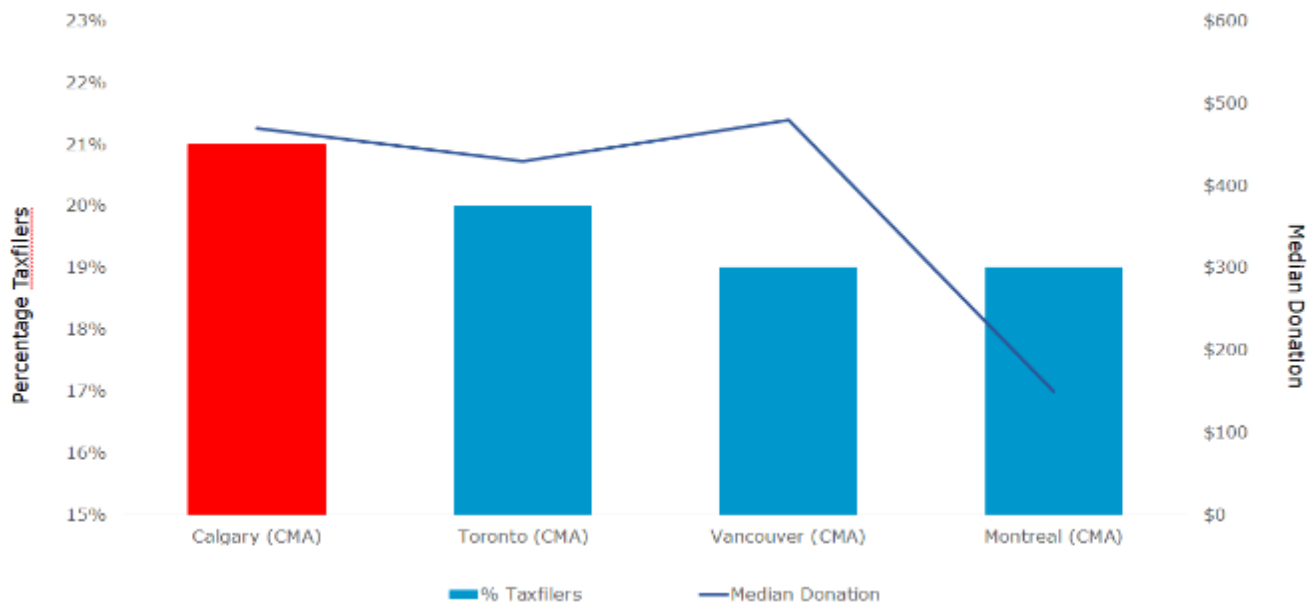


Figure 4.11: Philanthropic Contributions by Major City

The Municipalities for Climate Innovation Program delivered by the Federation of Canadian Municipalities (FCM) is another avenue for support and this is a five-year, \$75 million program that provides funding, training and resources to help Canadian municipalities adapt to the impacts of climate change and reduce **greenhouse gas emissions**.¹³⁶

Finally, the National Trails Coalition provided funding to improve recreational **trails** across Canada. The Federal Government's contribution was matched by the Coalition and its partners and helped build and renew multi-purpose trails for walking, running, cross-country skiing, biking, all-terrain-vehicle, and snowmobiles.¹³⁷

PHILANTHROPIC INVESTMENT



The relative wealth in Calgary within Canada makes it one of the highest per capita philanthropic donation communities (Refer to Figure 4.11).¹³⁸ An estimated 30 per cent of the donations were allocated to sectors in the active economy. Currently, philanthropic investment in the active economy is ad hoc and targeted primarily for building enterprise and not ecosystem capacity. It would appear that other sectors, such as **arts** and culture, meanwhile, have a far more robust ecosystem-level view of philanthropic investment to support broader capacity building.

IMPLICATIONS

STAGNANT ECONOMY



In addition to the current fragmented investment model, the current stagnant regional economy will have significant impact on the active economy over the next decade. This is because a significant proportion of Calgary's regional active economy has been traditionally dependent on municipal and provincial investment, to support either core operating or capital investment. As a result, Calgary's regional active economy must become far more collaborative. For active economy enterprises to survive and excel, the system as a whole must demonstrate how investment can contribute to achieving funder goals. This will require greater harmonization, compared to traditional competitive tendencies.

FRAGMENTED INVESTMENT MODEL



The current regional active economy investment model is fragmented across multiple domains. Today, competition for scarce private and public investments occurs between enterprises in delivery sectors, such as active living, organized sports, and active recreation. Moreover, across the eleven sectors there remains competition between groups such as school boards and provincial sport organizations. In this sense, individual active economy enterprises are competing with each other, often in a zero-sum

investment model, regardless of what would provide maximum systematic value to the entire community.

This lack of a coherent and integrated ecosystem-level investment strategy that could guide priority investment is one of the greatest barriers and opportunities facing the ecosystem. A benefit of Playbook 2030 could be providing an integrated framework for private and public sector investors on where their investments could have maximum system and community level impact.

SOCIAL & STRUCTURAL RESOURCE AUDIT

HIGHLIGHTS

Sense of Community: Calgary trends lower than both Alberta and Canada in many measures related to sense of community.

Volunteering: With 111,000 volunteers, contributing 14.6 million hours, Calgary's regional active economy is the highest proportion of volunteering, including sports, recreation and health and wellness.

Municipal Voting: Calgary municipal voting has varied widely from 20 to 58 per cent over the past five elections.

Community Associations: Calgary has a network of 150 community associations that provides a conduit to build social and structural capital at a local community level.¹³⁹

Other Associations: There are dozens of civic and additional community enterprises that facilitate social and structural capital for groups or functional areas.

Social and structural resources incorporate the tangible and intangible processes and structures that facilitate social bonding of individuals and enterprises. This includes the processes and structures that enable the effective leveraging of other resources, such as human or economic, that generate incremental value. Social resources may include dimensions such as culture, and knowledge management systems, and processes. Structural resources are the tangible and intangible processes and infrastructure that facilitate the effective collaboration and harmonization of individuals and enterprises within a city.¹⁴⁰

As a starting point, the Playbook must consider three key measures of social and structural resources: (a) sense of belonging; (b) volunteering; and (c) municipal voting.

SENSE OF BELONGING



A sense of belonging is defined as a feeling of reciprocity, fellowship, and being emotionally connected and committed to your community.

Figure 4.12 compares this sense of belonging in 2017 to other cities.¹⁴¹ Overall, Calgary's sense of belonging tracks lower than both the Canadian and Alberta averages.

VOLUNTEERING

In Calgary, 49 per cent of people report volunteering a minimum of once per month.¹⁴² Playbook 2030 estimates that there are 111,000 volunteers, contributing 14.6 million hours annually to Calgary's regional active economy.

MUNICIPAL VOTING

Over the past five Calgary municipal elections, voting turnout has ranged from 20 to 58 per cent. The overall level of voting is consistent with other Canadian cities.

SOCIAL AND STRUCTURAL RESOURCE INVENTORY

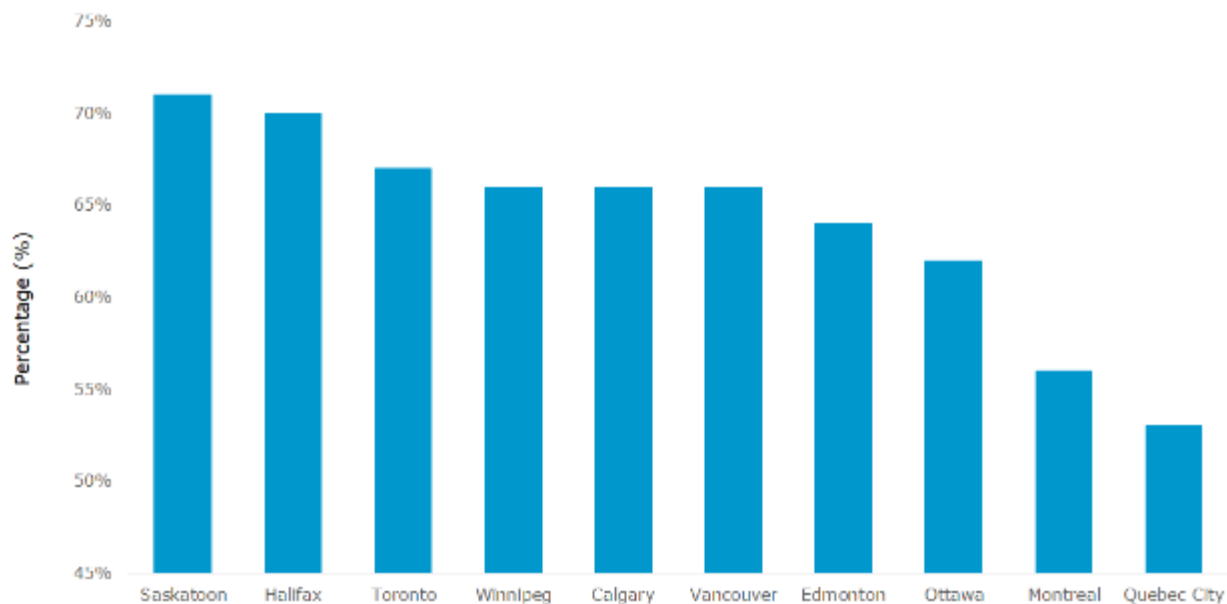


Calgary has a diverse but highly fragmented group of enterprises that play a vital role in facilitating social cohesion. The Playbook clusters these into: (1) organized sports and active recreation associations; (2) community associations; (3) civic organizations; and (4) other.

ORGANIZED SPORTS AND ACTIVE RECREATION ASSOCIATIONS

Calgary, and the region, have hundreds of organized sports, active recreation and health and wellness associations. These range from enterprises such as Hockey Calgary to the Calgary Horticultural Society. These can be classified as intra-group or inter-group structural capital.

Intra-group includes organizations whose mandate is facilitating collaboration among



4.12: Sense of Belonging (City Comparison)

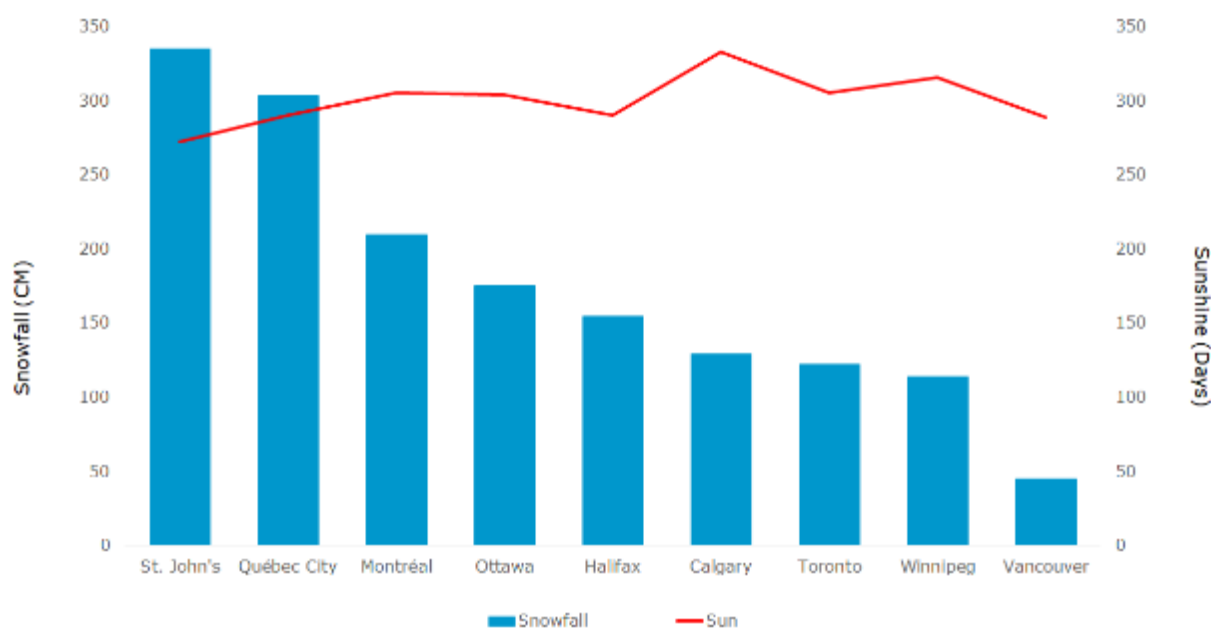


Figure 4.13: Average Snowfall and Sunshine of Major Cities¹

entities in the same sport or active recreation areas. An example here could be Calgary Minor Soccer Association or Bike Calgary. In contrast, inter-group structural capital is generated from organizations mandated to facilitate collaboration with groups across the **active ecosystem**. For example, the Calgary River Users Alliance (CRUA) coordinates among groups ranging from Alberta River Surfing Association (ARSU) to the Angling Outfitter and Guide Association of Alberta

(AOGAA). Refer to Appendix 8 for other examples of regional active economy intra-group and inter-group structural capital.

OTHER CIVIC ORGANIZATIONS

Calgary has a unique structure of 150 local community associations, which are critical to running organized sports and active recreation at the local levels and providing community level access. Their roles range from building and

maintaining outdoor rinks to tennis courts and community gardens. In 2016, Sustainable Calgary reported 29 per cent of households are members of their local community associations and the primary motivation for membership was accessing sport and recreation opportunities.¹⁴³

In addition, Calgary has numerous civic organizations that transcend Calgary's regional active economy, including Tourism Calgary, Platform Calgary, and Calgary Arts Development.

Finally, there are dozens of additional community organizations that facilitate structural capital for specific community groups, ranging from schools, seniors, cultural organizations, and religious groups. Each plays a vital role in supporting social cohesion.

"49 per cent of people report volunteering a minimum of once per month. Playbook 2030 estimates that there are 111,000 volunteers, contributing 14.6 million hours annually to Calgary's regional active economy."

IMPLICATIONS

Calgary has long been recognized as a community with significant social and structural resources led by a high level of volunteering. Similar to other areas, the challenge is fragmentation. Each resource plays an essential role in community cohesion; however, the hundreds of separate organizations and associations, of varying sizes, scope, and resources, make it challenging to facilitate harmonization or manage duplication of programming or infrastructure. Developing strategies that enable maximum impact of Calgary's regional active economy, demands that the fragmentation challenge be acknowledged and managed.

NATURAL RESOURCE AUDIT

HIGHLIGHTS

Mountains: Calgary is 62 km to the Canadian Rocky Mountains.

Rivers: Calgary is at the confluence of the Bow and Elbow Rivers.

Parks: 99.5 per cent of Calgary residents are within a five-minute walk of one of the 2,733 parks or greenspaces.¹⁴⁴ 8.25 per cent of Calgary has an urban canopy.¹⁴⁵

Calgary also has 150 public off-leash areas in multi-use parks. In total there are more than 1,250 hectares of off-leash spaces.¹⁴⁶

94 per cent of Calgarians are satisfied with parks.¹⁴⁷

Sustainability: Calgary reports some of the highest air and water quality in North America.

LAND RESOURCES

Calgary's land mass is 825.56 sq. km and is at an elevation of 1,045 m. The western slopes of the Canadian Rockies are approximately 62 km from the city which enables a range of four-season recreational amenities.

WATER RESOURCES

The Bow River begins within the Canadian Rocky Mountains and winds through the Alberta foothills, through Calgary and onto the prairies, where it meets the Oldman River, the two then forming the South Saskatchewan River. In addition, the Elbow River is 120 km long and flows from the Canadian Rockies to the city of Calgary, where it merges into the Bow River.

The Bow River provides habitat for wildlife and many opportunities for recreation such as fishing and boating. Both fly and spinner fishers share the river in all four seasons. Anglers from all over the world visit the Bow River for its thriving population of brown and rainbow trout.

The river also hosts canoes, kayaks, and rafts and following the floods of 2013, it also now hosts river surfing. The Harvie passage on the Bow River east of downtown is designed to support training paddlers and it includes two channels for users — a low water channel for inexperienced or novice rafters and paddlers, and a high-water channel, which is more challenging.

CLIMATE

The average daily temperatures in Calgary ranges from 16.5 °C (61.7 °F) in July to -6.8 °C in December. For gardeners, Calgary falls into the NRC Plant Hardiness Zone 4a. Calgary has the most sunny days year-round of Canada's largest

cities, with over 333 days of sun; it has on average 2,396 hours of sunshine annually, with an average relative humidity of 55 per cent in the winter and 45 per cent in the summer.¹⁴⁸

Winters are cold and the air temperature can drop to or below -20 °C on average of 22 days of the year and -30 °C on average of 3.7 days of the year. The cold is often broken up by warm, dry Chinook winds that blow into Alberta over the mountains. Though Calgary gets little precipitation (Refer to Figure 4.13¹⁴⁹), Sunshine Village in Banff National Park averages 10 meters of snow per year.¹⁵⁰ In summer, daytime temperatures in Calgary range from 10 to 25 °C.¹⁵¹

Climate change has also resulted in significant changes and potential impacts from severe weather events, which are forecasted to increase in future years.¹⁵² The increasing weather variability negatively impacts planning and securing major events to the region.

SUSTAINABILITY



At a macro-level, Calgary appears to be becoming more sustainable with indicators linked to water, air quality and waste-diversion. In 2018, Calgary’s average water consumption was 362 litres per capita per day, declining 11 per cent since 2012. Though Calgary possesses some of the best air quality in North America, it has recorded over 300 poor air quality events in the past two decades.¹⁵³ Waste-

diversion programs have also seen landfill use reduced by 50 per cent over two decades.¹⁵⁴

Calgary’s increased resource consumption over the past two decades is considered unsustainable; for example the city’s carbon and ecological footprints per capita are the highest in Canada (Refer to Figure 4.14¹⁵⁵) and over four times what is defined as Calgary’s “fair share” of global resources.¹⁵⁶ In 2017, Calgary had a population density of 2,473 persons/km² based on a population of 1,246,337 and a built-up area of 504 km². This was an increase of 5.3 per cent from the 2012 density.¹⁵⁷ A City of Calgary study estimated that increasing densification over the next 30 years could also reduce taxpayer burden by \$10 billion.¹⁵⁸

IMPLICATIONS

HARMONIZE MULTIPLE JURISDICTIONS

The Calgary regional active economy has access to world leading natural resources including mountains, rivers, and prairies. However, similar to other themes in this report, Calgary’s regional active economy crosses multiple jurisdictions, including three cities, six towns, four villages, two municipal districts and two First Nations. Moreover, it encompasses multiple school boards, one national park and dozens of provincial parks and recreation areas. As a region, we must view the current challenges as an opportunity to increase efficiencies and align on a shared goal and purpose.

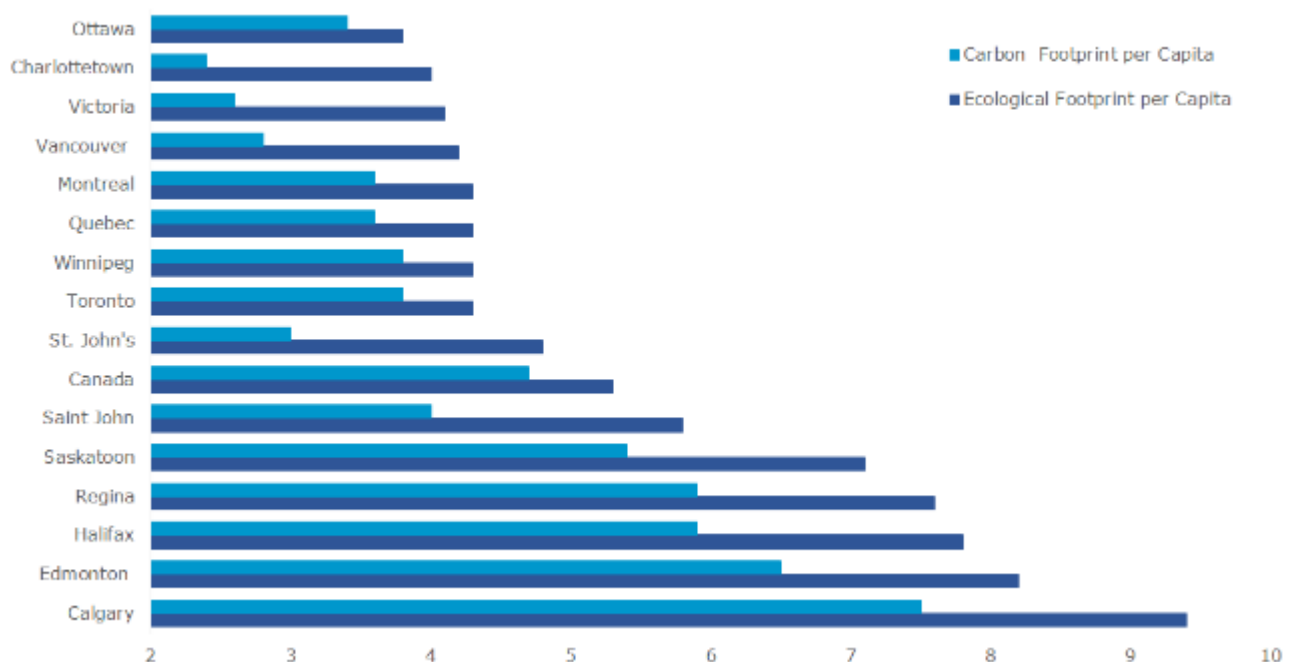


Figure 4.14: Average Carbon and Ecological Footprint Per Capita (2010-15)

BUILT RESOURCE AUDIT

HIGHLIGHTS

Private: Of the 3,945 active economy enterprises, an estimated 15 per cent are dependent exclusively on public infrastructure. The remaining are dependent on private or shared public/ private infrastructure.

Reinvestment: The City has defined 71 per cent of their facilities as either in poor or critical health.
¹⁵⁹

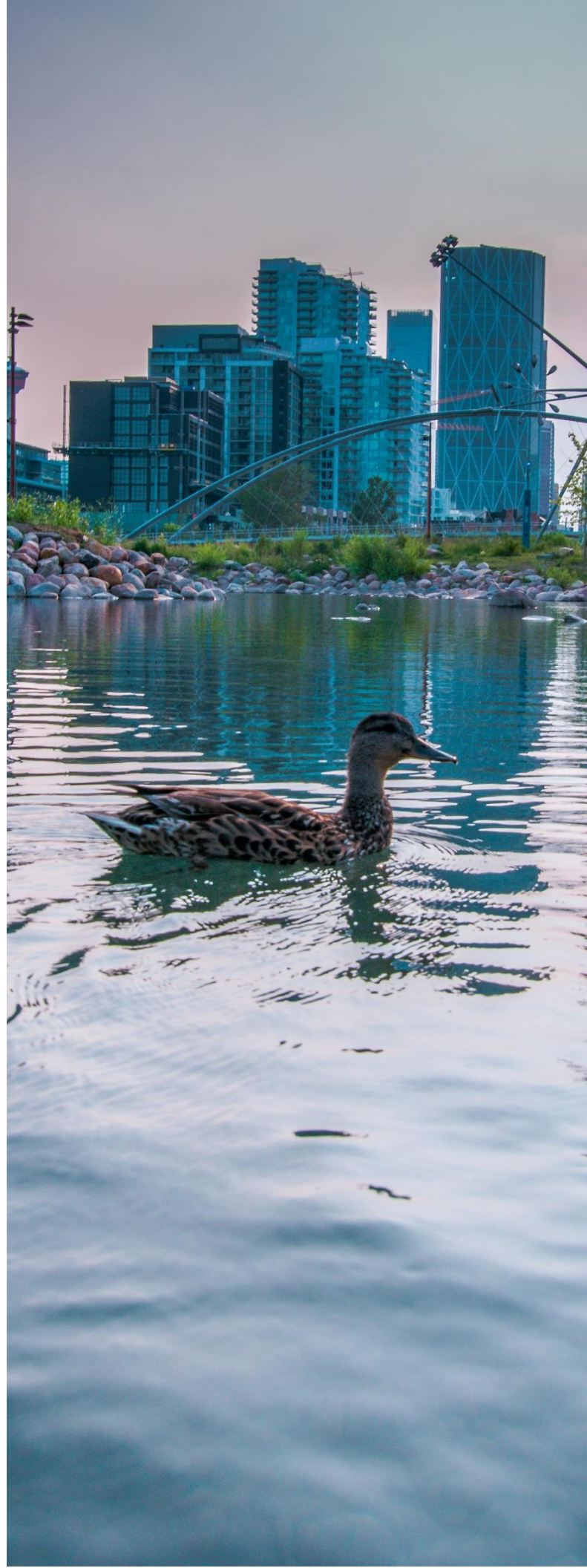
Transportation: There are 16,600 km of roads. 80 per cent of trips in Calgary are by personal vehicle. Calgary Transit provides 106.5 million trips annually, with an average trip length of 14.7KM.¹⁶⁰ In addition, the city has 1000 km of pathways and 54 per cent of Calgarians live within 400 m of an all ages/abilities bike route.¹⁶¹ Calgary maintains the second lowest aggregated walk-bike score of major cities in Canada.

BUILT RESOURCE AUDIT

The built resource audit was clearly complex and to complete it, the research team started with the full ecosystem review. From there, we utilized web-based resources including Calgary Parks, Calgary Recreation, and associated sites (e.g. Alberta College & Association of Chiropractors). The research team then sought to specifically capture public, private, and community assets. For the purposes of the table below, the infrastructure types refer to the primary operator of the facility; these include:

- **Public** – Operated by the City of Calgary
- **Community** – Operated by a community organization or non-profit
- **Private** – Private company and entrepreneurial endeavors

The list below also reflects identified assets within the boundaries of Calgary, with only the addition of ski facilities. We recognize that the ActiveCITY “ecosystem” includes areas around Calgary but we were unable to include these in this specific audit.



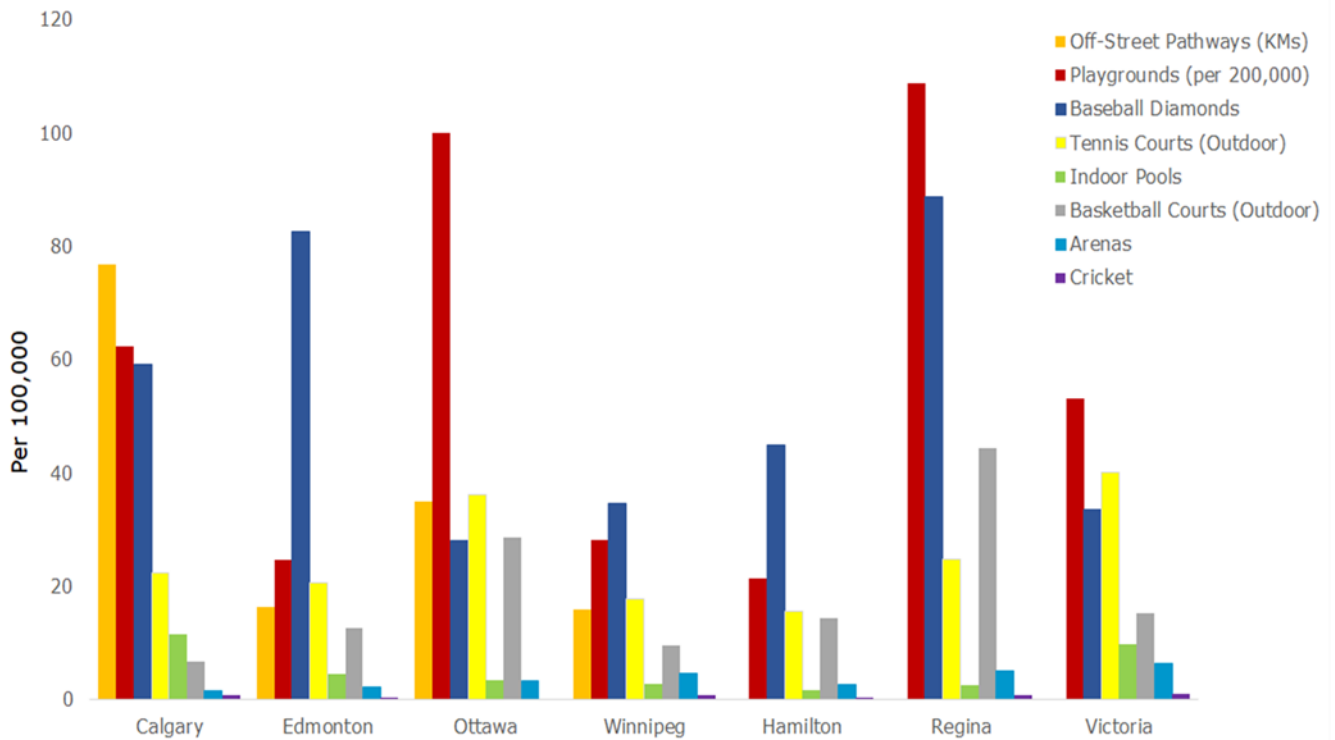


Figure 4.15: Sample Comparative Built Infrastructure per 100,000 Population

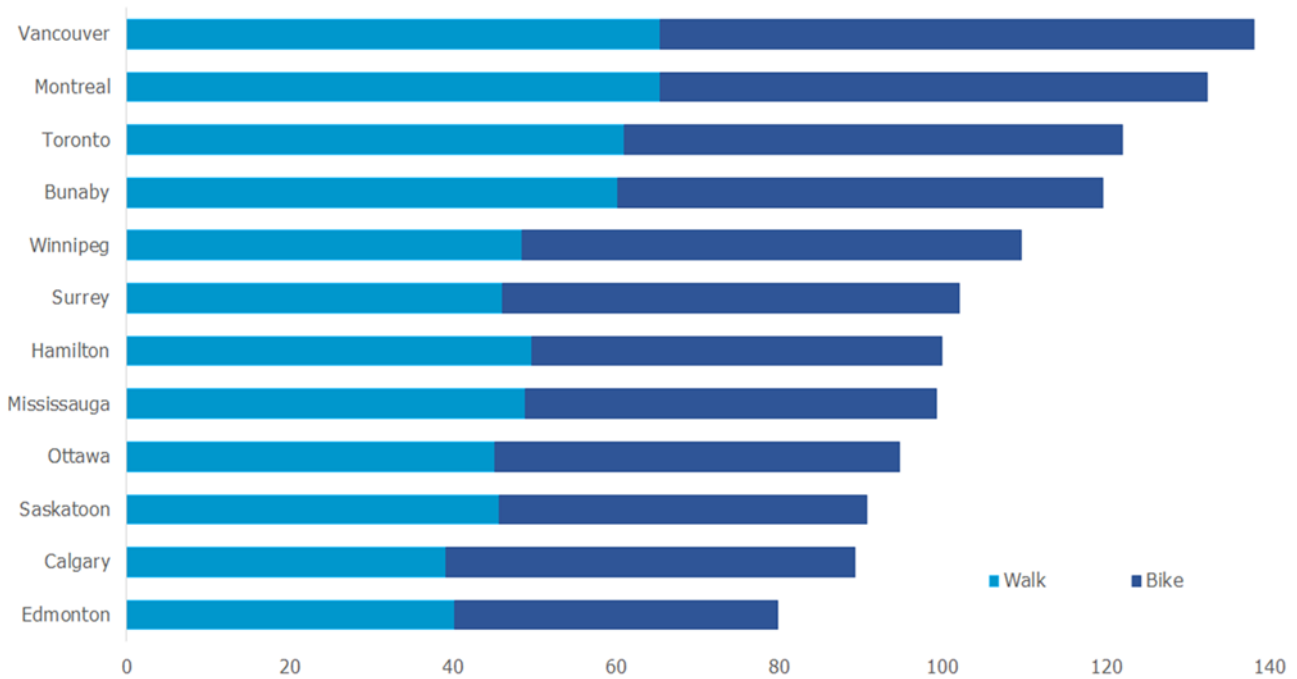


Figure 4.16: Aggregated Walk and Bike Score of Major Cities

When reviewing figure 4.15 recognize that it does not take into account capital or lifecycle financial contributions that might have been provided by municipal, provincial, or federal initiatives or grant programs. For example, the Great Plains Recreation Facility, Remington YMCA, Shane Homes YMCA at Rocky Ridge, and Brookfield Residential YMCA at Seton were financed at \$289.9 million with direct administration by the City of Calgary but are now partner-operated. Other aspects worth noting among many partnership approaches are that some facilities and assets are city-owned and operated but partner programmed.

To support **benchmarking**, the research team compared Calgary relative to other cities in Canada on a selection of built assets per 100,000 people. As per Figure 4.15, Calgary both leads and lags the country in a variety of areas.¹⁶²

ACTIVE TRANSPORTATION

The city has 1000 kms of pathways and 54 per cent of Calgarians live within 400 m of an all ages/abilities bike route,¹⁶³ Calgary also has the second lowest aggregated walk-bike score of major cities in Canada (Refer to Figure 4.16).¹⁶⁴

Feedback through the consultation processes suggest this apparent contradiction is because the pathway system was designed with a recreational, versus an **active transportation** goal. The latest data shows that less than three per cent of Calgarians use cycling as a primary means of commuting.¹⁶⁵ Local cycling data suggests that active transportation commuting is heavily influenced by distance and community. Commuting is then influenced by accessibility to protected cycling infrastructure and effective wayfinding. A positive step, meanwhile, is that the pedestrian and cyclist collision injury rate dropped by 8 per cent between 2015 to 2017.¹⁶⁶

In addition to the cycling paths, Calgary also maintains over 5,500 kms of sidewalks. However, 50 per cent of the sidewalks in the city are more than 40 years old and the current maintenance program replaces only an estimated 31 kms of sidewalks per year. Illuminating the challenges in this realm is that the City of Calgary currently allocates five times more capital to roads than to sidewalks and pathways.¹⁶⁷

SUMMARY

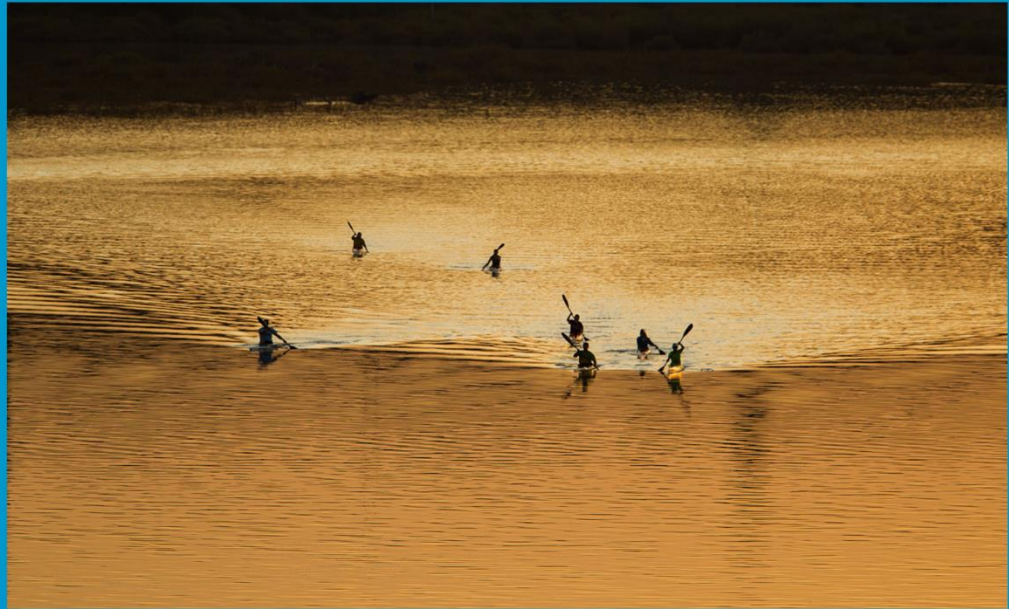


By most measures, Calgary's regional input resources are the envy of Canada. This includes a diverse and engaged highly educated citizenry, significant economic wealth and a breadth and depth of natural and built resources. However, there are areas of current or emerging weakness that impact community input resources. This includes an economy that maintains a disproportionate dependence on an energy sector anchored in macro political and economic dynamics far beyond the city's control. Calgary also continues to focus on diversification efforts, but the weakness of this sector for the past six years and forecast for it to continue in the near future will have a massive systematic impact. This will include public fiscal capacity and migration patterns.

A second area of weakness is the fragmented nature of the current regional active economy. This includes multiple levels of governments, political jurisdictions, and competing sectors. However, this weakness also reflects the most significant opportunity for Calgary's regional *ActiveCITY* Collective. Calgary's current active economy has many strengths but lacks an overall coherent investment strategy. This will have significant impact on the city's increasingly diverse and older population. Increasing alignment of an integrated vision and operational plan offers significant potential which is further discussed in Section 7.

"Local cycling data suggests that active transportation commuting is heavily influenced by distance and community.

Commuting is then influenced by accessibility to protected cycling infrastructure and effective wayfinding."



5

ACTIVITY AUDIT

When conducting an activity audit of the Calgary regional active economy, the project team conducted two levels of analysis. The first is to audit active economy enterprises. To do so, the team followed the NAICS model introduced in Section 3. The second level of analysis audited the active economy at a structured activity level. This considers the activity outputs of the respective organizations. In total, based on the conclusions of this audit, the *ActiveCITY* Collective estimates Calgary's regional active economy contributes \$3.3 billion annually to the regional gross domestic product.

ENTERPRISE AUDIT



As per Figure 5.1, which considered Calgary’s regional active economy by enterprises, the total regional active economy incorporates 3945 enterprises, employing 42,658 full time equivalent (FTE).¹⁶⁸

55 per cent of enterprises are classified in the organized sports and active recreation sectors. When further examining Calgary’s regional active economy, organized sports contains 38 per cent of all employees, followed by products and gear at

23 per cent. The products and gear sector include sporting goods retailers (and specifically Calgary’s Sport Chek head office). The third highest employee count was active recreation at 20 per cent.

Calgary’s regional active economy is highly entrepreneurial with 90 per cent of enterprises having less than 10 staff and 68 per cent of the organizations being micro-enterprises (Refer to Figure 5.2). The sector is anchored by an estimated 111,000 Calgarians volunteering a total of 14.8 million hours per year to regional active economy enterprises, primarily in organized

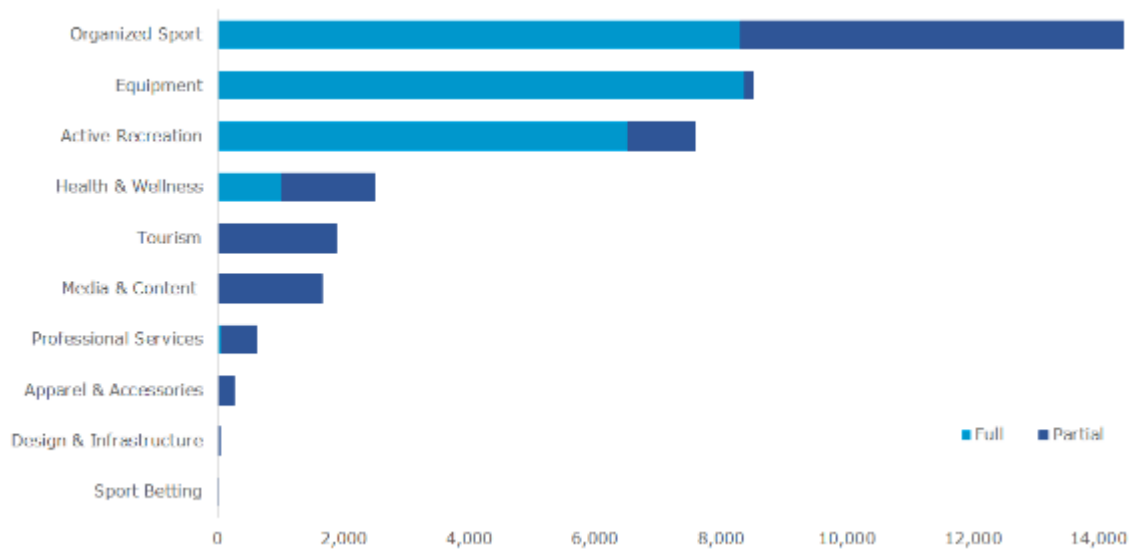


Figure 5.1: Regional Active Economy by Employees

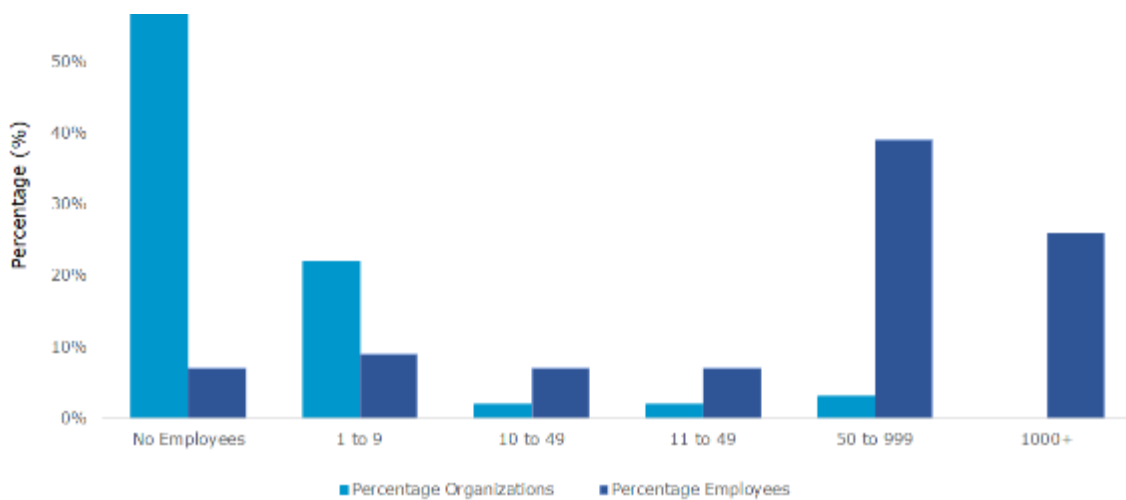


Figure 5.2: Regional Active Economy by Company Size

sports, active recreation, and health and wellness.¹⁶⁹ Based on Conference Board of Canada methods, Playbook 2030 estimates regional active economy volunteering adds a minimum of \$400 million annually to the regional gross domestic product.¹⁷⁰

Finally, when examining the sector by mission, 84 per cent of the enterprises in Calgary’s regional active economy are commercial for-profit enterprises. This reinforces the position that this sector is highly entrepreneurial.

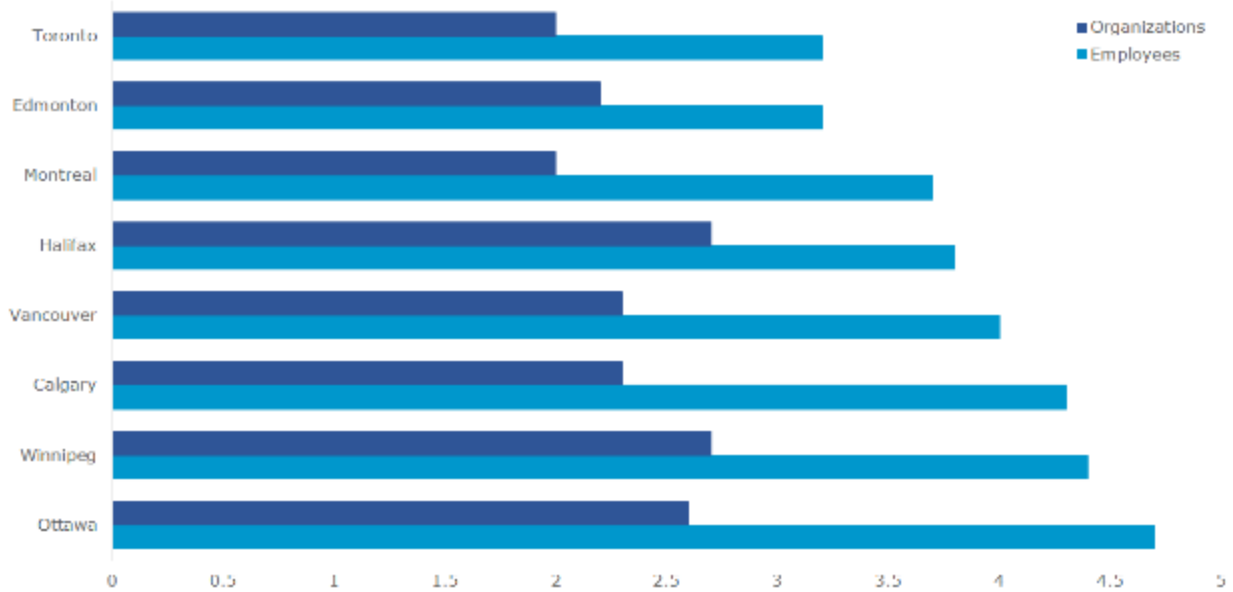


Figure 5.3: Regional Active Economy City Comparison (Enterprises & Employees)

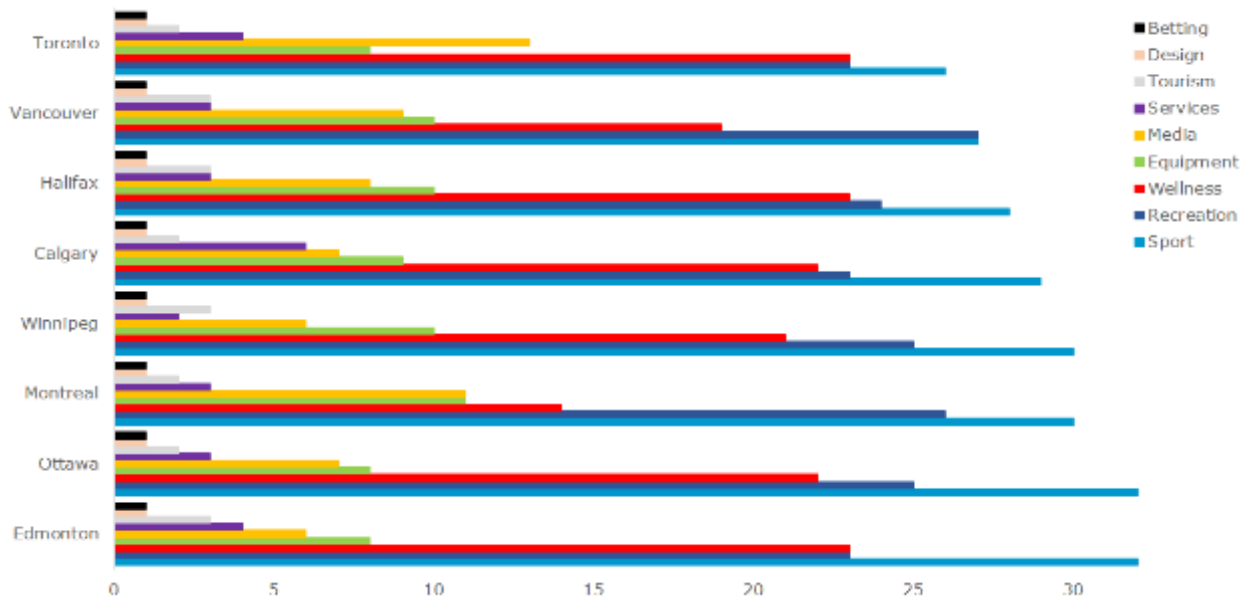


Figure 5.4: Regional Active Economy City Comparison (By Sector)

Commercial enterprises extend across all eleven sectors in Calgary's regional active economy, with organized sports having a majority of social enterprises, and active recreation having a minority in the public sector. When comparing Calgary's regional active economy to other regions in Canada, only Ottawa and Winnipeg have a greater proportion of active employees (Refer to Figure 5.3). In Figure 5.4, the regional active economies are then broken down by sector. In all cases, Calgary's regional active economy is dominated by organized sports, active recreation, and health and wellness. The dominance of organized sports in cities such as Edmonton and Ottawa, may be related to the number of national and provincial sport organizations based in these capital cities.

IMPLICATIONS

Calgary has a rich but fragmented entrepreneurial active ecosystem that benchmarks as one of the leaders in Canada on both the per capita number of enterprises, employees, and volunteers. Calgary's active ecosystem is heavily concentrated in the organized sports and active recreation sector, anchored in entrepreneurial organizations, highly dependent on community volunteers for sustainability. This leaves it open to challenges of leadership and sustainability. The employment opportunities associated with Calgary's regional active economy, meanwhile are heavily concentrated in several larger enterprises, which creates both opportunities and risk if they choose to depart.

The audit of regional active economy activities and outputs is challenging given the diversity of the activity economy. To contextualize it, the project team isolated the activities and associated outputs at a sector-level.

From a consumption perspective, Calgary leads the nation in consumer expenditures related to Calgary's regional active economy.¹⁷¹ In fact, Calgary is almost double the national average in total recreation spending, attendance at live sporting events, recreation memberships and sports equipment. Calgary even leads the country in gardening related expenditures, with a 23 per cent higher than the national average. In total the annual sports and recreation related expenditures in Calgary is \$3.15 billion.¹⁷²

ORGANIZED SPORTS AND ACTIVE RECREATION AUDIT

Calgarians spend \$2,671 per household annually on sport and active recreation experiences, double the national average.¹⁷³ To break this down to an activity level, the project team conducted a two-phased study. The first collaborated with the larger community partners, including Hockey Calgary, the Calgary Minor Soccer Association and The City of Calgary Parks and Recreation to calculate the total number of programs and associated activity hours. The second forecasted the programming at a sub-sector level. For example, to calculate the CrossFit programming and hours, the project team collected data from a sample of CrossFit studios. This included:

- Average number of classes per day.
- Average number of participants per class
- Average duration of class

Based on this data, the project team estimated the number of CrossFit programming offered annually and the total hours. This method was then repeated for all sub-sectors. In summary, the team estimates Calgary's regional active economy produces 27 million hours of structured physical activity (organized sports and active recreation) annually. An important note is that this represents only a fraction of the physical activity as it excludes all unstructured sports and active recreation (e.g. jogging, recreational skiing). Refer to Appendix 10 for a full audit of programming.

ENGAGEMENT

We engage in the active economy in a variety of roles. The outcome of the public engagement suggests that the most prominent form of engagement in the active economy is as a fan. The region is home to teams in numerous high-performance professional and amateur leagues including:

- Calgary Flames (National Hockey League)
- Calgary Stampeders (Canadian Football League)
- Calgary Roughnecks (National Lacrosse League)
- Calgary FC (Canadian Premier League)
- Calgary Hitmen (Western Hockey League)

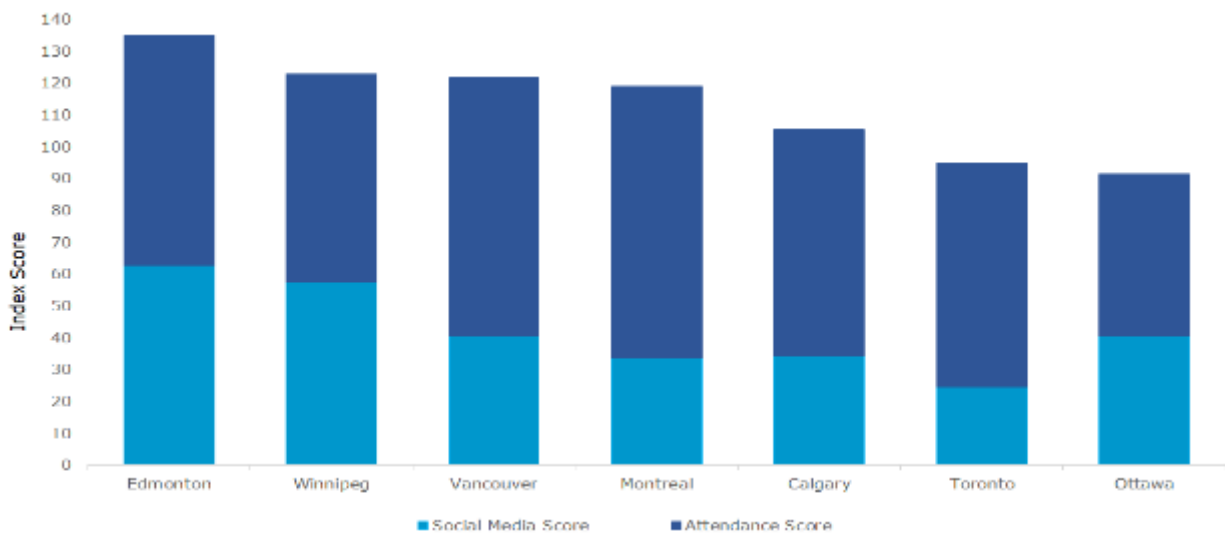


Figure 5.5: Regional Sport Fan Engagement Index

- Calgary Canucks (Alberta Junior Hockey League)
- Canmore Eagles (Alberta Junior Hockey League)
- Okotoks Oilers (Alberta Junior Hockey League)
- Okotoks Dawgs (Western Baseball League)

To evaluate Calgary’s relative fan engagement, the project team compared Calgary to other major Canadian cities (with populations over 500,000). To do so, the research team developed a two-tiered fan engagement index incorporating both per capita social media engagement of major sports teams (NHL, CFL, NLL, CPL/MLS) and paid fan attendance as a percentage of capacity.¹⁷⁴ Figure 5.5 presents these results. Based on this index, Edmonton is the top ranked city by sport fan engagement, with Calgary ranking fifth.

MAJOR EVENTS

In addition, the Calgary region hosts major national and international sporting competitions annually including the Stampede and Spruce Meadows Show Jumping Tournaments. In 2018 Calgary hosted 89 events which generated \$108 million in economic impact representing a \$49 to \$1 return on Municipal and Provincial investment.¹⁷⁵ In 2019 Calgary hosted 67 events which generated \$151 million in economic activity and a ROI of \$30 to \$1.¹⁷⁶

Over the past five years Calgary has hosted:

1. 90+ International Events including World Cups

2. 110+ Canadian National Championships and Cultural Events
3. 120+ Provincial and Western Canadian Championships
4. Sport competition in 50+ different sports
 - 30+ Hockey
 - 20+ Ski/snowboard
 - 20+ Swimming
 - 20+ Volleyball
 - 10+ Water Polo
 - 10+ Speed Skating
 - 10+ Rugby
 - 10+ Golf
 - 10+ Baseball

OTHER ACTIVITY

In addition to the activities and outputs associated with active living, organized sports and active recreation, there are measurable activities and outputs associated with the other eight sectors of the active economy. The scope of these sectors and their outcomes are as diverse the sectors themselves. For example, they incorporate specialty retailers, eco-guides, physiotherapists, software developers and racetracks. Refer to Table 5.1 for a summary of the associated activities and outputs. Note that in some cases we include current data, in others are examples of output indicators where current data is unavailable.

Table 5.1: Other Activities and Outputs

Other Activity	Scope	Outputs
Active Living	Active transportation Community gardens Outdoor play	Measurement of people who engage in active transportation Measurement of community gardens and associated volunteers Measurement of hours per week of unstructured play
Active Products & Gear	23 specialty retail locations Retail 9 wholesalers Development	Calgarians purchase \$288 of athletic shoe wear annually, 30 per cent higher than the national average. ¹⁷⁷
Active Equipment & Accessories	243 specialty retail locations Retail & Service 37 wholesalers Development 23 manufacturers	Calgarians purchase \$473 of sporting equipment annually, double the national average. Calgarians spent another \$607 on garden supplies and services, 20 per cent higher than the national average. ¹⁷⁸
Active Design & Infrastructure	32 developers Development Urban Planning Architecture	Calgary has added an average of 11,338 new housing units built annually between 2015-2019 in 198 communities. ¹⁷⁹
Active Media & Content	471 content producers Content producers 17 broadcasters Content broadcasters	37 per cent of content produced is linked to the active economy. 79 per cent of all sponsorship is related to the active economy. ¹⁸⁰
Active Tourism	Activities related to active tourism are captured in organized sports and active recreation.	An estimated 69 per cent (1.4M) international visitors and 13 per cent (4.7M) domestic visitors consume at least one active economy experience per year. ¹⁸¹
Health & Wellness	363 chiropractor offices Chiropractor 156 specialty therapist offices Specialist therapy 39 specialty retailers Specialty retailers Other providers	Measurement of health and wellness expenditures associated uniquely to the active economy.
Professional Services	21 sport advisory services Sport Advisory Services 1 ticket service organization Ticketing Services Other Services	Measurement of professional services expenditures associated uniquely to the active economy.
Sport Betting	Includes horse racing, tracks casinos, fantasy sports, online gambling There are nine casinos within Calgary's regional active economy and one racetrack.	Calgarians spend \$66 annually on gambling, 30 per cent below the national average. No precise number is allocated for sport betting, however, an estimated five per cent of all gambling is related to sport betting ¹⁸²



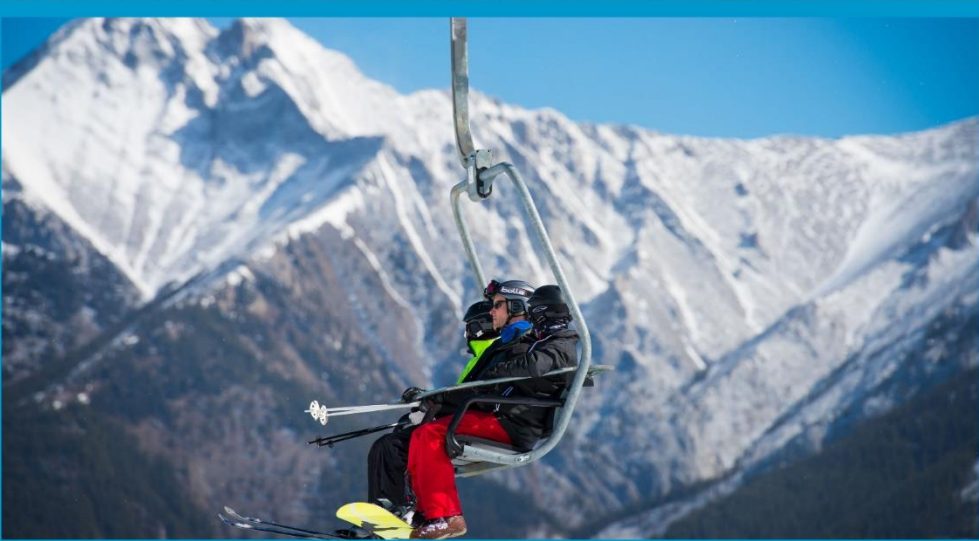
IMPLICATIONS

Pathway to Scale: The current regional active economy is both vast and fragmented, with limited to no cohesion or efficiencies. The data suggests that the overwhelming majority of enterprises in the ecosystem are micro-enterprises, including 68 per cent of enterprises having no employees. The ecosystem must identify a pathway to scale to drive both efficiency and growth. One critical area is the lack of harmonized capacity building in the current system, including both financial and human capital. At best, this can be described as ad hoc and incremental.

Role of Public Investment: There may be a place to re-envision the role of the public sector in the active economy. To date, the public sector has played a diversity of roles in the active economy. This includes investing in both natural and built infrastructure and delivering active economy programming and services.

The project team believes the public sector can play a catalytic role as an enabler of private sector innovation. For example, public sector investment in pathways and cycle-tracks could be viewed as catalytic investments to spur private sector investment to activate those assets. This may be in the form of local bike retail, service, design, and manufacturing. It could also act as an enabler for corporate and small active transportation wellness programs.





6

IMPACT ON COMMUNITY PROSPERITY

With a complete audit of inputs, activities, and outputs, this section evaluates the evidence of how each impact one or more of the four dimensions of community prosperity.

ECONOMIC IMPACT OF THE ACTIVE ECONOMY



4,000
ORGANIZATIONS

EMPLOYS
43,000
PEOPLE



WORKPLACE WELLNESS
PROGRAMS PROVIDE A
3 TO 1
RETURN ON INVESTMENT

90%
ARE ENTREPRENEURIAL
SMALL BUSINESS



TRAFFIC CONGESTIONS
COSTS CANADIANS
\$4.5B ANNUALLY

13 TO 1
RETURN ON INVESTMENT
FOR ACTIVE TRANSPORTATION
INFRASTRUCTURE

CALGARIANS SPEND

\$3.15B

ON SPORT AND RECREATION.
2X THE NATIONAL AVERAGE.

\$3.3B

ANNUAL IMPACT ON GDP

**PHYSICAL
ACTIVITY**



REDUCES HEALTH
CARE COST BY
\$400M ANNUALLY



REDUCES
ABSENTEEISM
BY 25%
ANNUALLY

ECONOMIC IMPACT



The economic impact of Calgary's regional active economy incorporates direct employment, reduction of health costs, increased productivity, and contribution to talent acquisition.

DIRECT EMPLOYMENT

Based on direct employment, Calgary's regional active economy contributes an estimated \$3.3 billion annually to the regional gross domestic product.¹⁸³

REDUCTION IN HEALTHCARE COSTS

1.9 per cent Reduction in Healthcare Costs:

An Ontario 2016 study identifies a 1.9 per cent reduction in total healthcare expenditure over the 10-year period based on improved health behaviours, including minimum levels of physical activity.¹⁸⁴ Similarly, a study for the British Columbia Ministry of Health Planning estimated annual cost savings of \$49.4 million if they could reduce physical inactivity by 10 per cent.¹⁸⁵

€80.4 billion per year to the European Union:

Inactivity imposes economic costs of €80.4 billion per year to the EU-28 through coronary heart disease, type 2 diabetes, colorectal and breast cancer and through the indirect costs of inactivity-related mood and anxiety disorders.¹⁸⁶

Economic Growth: A Conference Board of Canada study forecasts that increasing activity in ten per cent of Canadians would increase the gross domestic product (GDP) by \$7.5 billion between 2015-2040. Along with this boost to the economy would be a cumulative \$2.6 billion reduction in healthcare spending on hypertension, diabetes, heart disease and cancer.¹⁸⁷

\$2,130 Annually per Person: A Singapore study estimates that the cost of inactivity is \$2130 (CDN) annually, per person, including increased healthcare costs and economic impact.¹⁸⁸

£2 billion Annual Impact to the UK: The British Government estimates that a ten per cent increase in adult physical activity would prevent around 6,000 premature deaths, not to mention bringing economic impacts worth at least £2 billion a year.¹⁸⁹ Moreover, a second UK study, estimates the total cost of a sedentary lifestyle on the British economy is £7.4 billion.¹⁹⁰

3 to 1 Return on Investment: The Australian Sport Commission estimates that for every \$1 in investment on physical activity, it translates into \$3 of savings in healthcare expenditures.¹⁹¹

Obesity costs Calgary \$395 million Annually:

Alberta Health reports that obesity is related to 22 major health conditions, including Type 2 diabetes, cardiovascular diseases and 14 types of cancers, costing the province in excess of \$1.31 billion annually. This translates into an annual cost of \$395 million for Calgary.¹⁹² Similarly, the annual direct healthcare cost of obesity in Canada (including physician, hospitalization and medication costs) is estimated to be 3.9 per cent¹⁹³ of all healthcare costs which will be \$9 billion by 2021.¹⁹⁴ Further concerning is that this estimate accounts for only the healthcare costs and not for loss of productivity.

"Based on direct employment, Calgary's regional active economy contributes an estimated \$3.3 billion annually to the regional gross domestic product."

INCREASED ECONOMIC PRODUCTIVITY

Reduce Absenteeism by 25 per cent: Physical activity increases economic productivity by reducing absenteeism by an estimated 25 per cent. This translates into an estimated one-week per year in lost productivity.¹⁹⁵

Wellness Program ROI: Multiple studies show that workplace health and wellness programs demonstrate a minimum of three to one return on investment through lower absentee rates and improved productivity and fewer health-related work limitations.¹⁹⁶

Increased Productivity: A study conducted for Sport and Recreation Victoria (Australia) estimates that physical activity increases individual productivity between \$200 to \$1,250 per person.¹⁹⁷

Economic Cost of Traffic Congestion: The Council of Ministers Responsible for Transportation and Highway Safety estimates the cost of traffic **congestion** in Canada to be \$4.5 billion.¹⁹⁸ Similarly, the Bureau of Transport and Regional Economics estimates that congestion in Australia's eight capital cities cost nearly US \$2.8 billion in lost productivity.¹⁹⁹ Another study estimates traffic congestion, costs the UK economy approximately £9.5 billion annually.²⁰⁰

TALENT ACQUISITION AND RETENTION

Talent and Competitive Advantage: A city's competitive advantage has typically been defined by its proximity to scarce natural resources, ranging from lumber to navigable waterways. For the past two hundred years, these natural advantages contributed to the growth of cities through commodity extraction or manufacturing centres. Over the past four decades, however, the competitive advantage of many cities, driven by economic, social, and cultural factors such as advanced technology and globalization, has transitioned to their ability to attract and mobilize human capital. Today, a city's capacity to develop, acquire and retain high-valued talent thus underpins much of its economic and social prosperity.²⁰¹

Place Building: Calgary Economic Development's strategy "*Calgary in the New Economy*", called for the city to develop a unified talent plan, focused on the critical competencies to maintain the city's competitiveness, and developing a strategy to both recruit and retain essential talent. In this report, the principle of place-building was defined as an integral part of the city's economic development strategy. Moreover, Playbook 2030 defines the goal of making Calgary Canada's most livable region. What role does Calgary's regional active economy then play in defining livability to support the recruitment and retention of world-leading talent?

The Influence of Amenities: Research has explored the drivers of talent mobility²⁰² which is highly contextual and driven by the motivations and opportunities of an individual and their family. This research also identifies a series of consistent factors that influence decision-making amongst highly sought-after talent. These include relational factors, economic factors, active, creative and learning experiences and its overall transportation system.

Economic geographers broadly define amenities to include access to arts, culture, sports, and recreation. More specifically, research focusing on younger workers in the knowledge economy note that they are attracted to communities that are energetic and **vibrant**, defined by the importance of visual and audio cues such as outdoor dining, active outdoor recreation, a thriving music scene, and an active nightlife. Finally, leisure and recreation opportunities are the leading factors influencing young, single, highly qualified people to live downtown.

"Respondents identify sport and recreation to be the third highest factor for choosing where they live within Calgary."

The Regional Active Economy as a Talent Magnet: Talent retention has been central to the community engagement process and it specifically explores the factors that influence people to choose to live in the region, including:

1. Career/ job opportunities
2. Proximity to friends and family
3. Sport and recreational opportunities
4. Arts and culture opportunities
5. Educational opportunities
6. Safety and friendliness
7. Affordability relative to other cities

Respondents identify sport and recreation to be the third highest factor for choosing where they live within Calgary. This was just after proximity to friends and family and career / job opportunities. This local research validates global studies that show a multitude of inter-dependent factors influencing talent mobility. However, this research also supports the notion that young, highly educated talent prioritizes sport, recreation, arts, and culture amenities over other factors.

ECONOMIC IMPACT OF ACTIVE DESIGN & TRANSPORTATION

13-to-1 ROI: The National Health Service meta-analysis identifies that increases of walkability yield on average a 13 to 1 return on investment.²⁰³

Retail Sales: A British study found urban design that increases walking and cycling can increase retail sales up to 30 per cent.²⁰⁴

Property Value: A US study found retail areas with walk scores over 80 had a 29 to 49 per cent increase in property value.²⁰⁵ Similarly, residential property value increased by an estimated 12 per cent in neighbourhoods with high walkability scores.²⁰⁶ Finally, a US study found that there was a property value premium in communities with **walkable** schools.²⁰⁷

Reduced Infrastructure Costs: A UK study for the Department of Transport estimates condensed **walkable communities** reduce municipal infrastructure costs by 33 per cent.²⁰⁸

Shared Infrastructure: A study conducted by the Center for Cities and Schools at the University of California-Berkeley, recommended a planning strategy where public schools are designed as **community hubs**, including community health centers, swimming pools, libraries, and other public assets to reduce both capital and operating expenses.²⁰⁹

Cycling ROI: A study conducted for the City of Portland estimates investments in bike facilities (costing from \$138 to \$605 million) will result in healthcare cost savings of up to \$594 million, fuel savings of up to \$218 million over a 25-year period.²¹⁰

Sidewalk ROI: A study in the Journal of Preventative Medicine found that capital investment in sidewalk construction and maintenance provides an 18 to 1 return on measures related to healthcare and air quality.²¹¹

ACTIVE ECONOMY CONSUMER EXPENDITURE

This is incremental to the annual sports and recreation related expenditures in Calgary of \$3.15 billion.



IMPLICATIONS

The evidence of the active economy's impact on community prosperity is overwhelming. This impact comes in five major forms:

1. Reduction of upward pressure on provincial healthcare costs
2. Increased productivity
3. Talent acquisition and retention
4. Active design and transportation
5. Active economy expenditures

A challenge with these impacts is that they are not harmonized nor aligned to ensure maximum value. Examples include recognition that economic impacts of reduced healthcare costs accrue primarily to the provincial government, whereas the investments required to deliver it, are municipal. The economic impact of increased productivity and talent acquisition and retention accrues directly to a specific enterprise yet if harmonized the potential impacts are exponential. A third example is that the economic impact of active design and transportation is structural and measured in decades, not in election cycles. Finally, active economy expenditures are immediate, whereas the impacts are measured over years. This lack of immediate return on investment must be more effectively measured and tracked at an ecosystem-level.

HUMAN PROSPERITY



The active economy directly impacts physical and mental health and wellbeing. This includes a reduction of obesity and physical and mental health effects. Moreover, studies confirm that the active economy contributes directly to the measurable development of critical competencies essential for a modern, adaptive, and resilient labour force.²¹²

PHYSICAL HEALTH

22 Major Health Conditions: Alberta Health reports that obesity is related to 22 major health conditions, including Type 2 diabetes, cardiovascular diseases and 14 types of cancer. Furthermore, it is estimated that one in ten premature deaths among Canadian adults aged 20 to 64 are related to obesity and sedentary lifestyle.²¹³

Extend Life by 3.8 Years: A 2016 Statistics Canada report estimates a sedentary lifestyle reduces life expectancy by 3.8 years.²¹⁴ Consistent with this finding, a 2012 study published in the Lancet, estimates that physical

inactivity is responsible for nine per cent of the world's mortality.²¹⁵

Stair Use: A study published in the *European Journal of Cardiovascular Prevention & Rehabilitation*, identifies using stairs can be linked to a 12 to 20 per cent reduction in all-cause mortality, including reductions in cardiovascular disease.²¹⁶

Diabetes Risks: Being physically active reduces a person's probability of developing Type 2 Diabetes by 43 per cent, hypertension by 26 per cent, and osteoporosis by 36 per cent.²¹⁷

Cancer Reduction: Cycling to work is associated with a 45 per cent lower risk of developing cancer and a 46 per cent lower risk of developing heart disease, compared to commuting by car or using public transit.²¹⁸

Active children: Being active as children increases the likelihood of being physically active as an adult by ten per cent.²¹⁹

Collisions: Data has shown that marked bike lanes on roads reduce motor vehicle-bicycle collisions by as much as 50 per cent.²²⁰

MENTAL HEALTH

Evidence illustrates that physical activity contributes positively to mental health, including a positive effect on anxiety, depression, mood and emotion, self-esteem and psychological dysfunction.²²¹ Research by Statistics Canada identifies that 71 per cent of participants in sports do so for fun and relaxation, compared to 69 per cent for physical fitness.²²² However, there remains a poor understanding of the mechanisms that underlie the relationship between physical activity and psychological wellbeing.²²³ Nevertheless, research evidence illustrates the following:

Reduced Depression Risk by 20-30 per cent: A joint study by the Chief Medical Officers of the UK Home Countries, reports that physical activity can reduce the risk of depression and dementia by 20-30 per cent. It also shows that physical activity can enhance psychological wellbeing, by improving self-perception and self-esteem, mood, and sleep quality, and by reducing levels of anxiety and fatigue.²²⁴

Establishing exercise goals are strongly related to physical self-worth, psychological wellbeing, and psychological need satisfaction and lower exercise anxiety.²²⁵

HUMAN IMPACT OF THE ACTIVE ECONOMY

SEDENTARY LIFESTYLE
CONTRIBUTES TO

22

MAJOR HEALTH
CONDITIONS.

SEDENTARY LIFESTYLE
CONTRIBUTES TO

1 IN 10

DEATHS OF
CANADIANS AGED
20-65.

20-30%

REDUCTION IN THE
RISK OF DEPRESSION
AND DEMENTIA BY
BEING PHYSICALLY
ACTIVE

PHYSICAL ACTIVITY EXTENDS
LIFE EXPECTANCY BY

3.8 YEARS
IN CANADA

IN CANADA.
BEING PHYSICALLY
ACTIVE REDUCES A PER-
SON'S PROBABILITY
OF DEVELOPING TYPE
2 DIABETES BY 43%

CYCLING TO WORK IS
ASSOCIATED WITH A

46%

LOWER RISK OF
DEVELOPING HEART
DISEASE COMPARED
TO DRIVING OR
TRANSIT.

USING STAIRS CAN
REDUCE ALL-CAUSE
MORTALITY BY

12-20%

PLAYING ORGANIZED

SPORT AS
CHILDREN

INCREASES THE
LIKELIHOOD OF BEING
PHYSICALLY ACTIVE AS
AN ADULT BY 10%

52% OF WOMEN IN
THE C-SUITE PLAYED

UNIVERSITY
LEVEL
SPORTS

PHYSICAL ACTIVITY
INCREASES

ADAPTABILITY
& CONFIDENCE

IN MANAGING
UNCERTAINTY AND
ANXIETY.

Life Satisfaction: Research suggests that membership with a sports club has an equivalent effect on life satisfaction and happiness as moving up approximately one and a half household income categories (approximately \$6,100 dollars).²²⁶

Enhanced Prosocial Behaviour: A study by Ontario's Ministry of Health Promotion and Sport found that participation in recreational activities decreased emotional and behavioural problems in children and enhanced the psychosocial health of families.²²⁷

Self-Worth: A Norwegian study found that body areas satisfaction, appearance evaluation and athletic competence moderated a sense of global self-worth among teens, with females having the greatest impact.²²⁸

Impact on ADHD: Participation in a sport by children with ADHD has shown to positively impact peer relationships, contributing to increased happiness and self-confidence.²²⁹ A second study found that children diagnosed with ADHD receive as much benefit from walking in a park as they do from medication therapies.²³⁰

Reduced Anxiety: Participation in physical activity can result in a reduction in anxiety levels and self-reported feelings of increased wellbeing. Such improvements have been reported to last for up to three hours after the activity session.²³¹

Self-Esteem: Improved self-esteem, self-efficacy and perceived competence can result from long-term participation in an exercise program.²³²

Seniors: Several studies of older women found that physical activity was associated with overall **quality of life**, more positive moods, reduced anxiety, improved social functioning and life satisfaction.²³³

Physical Disabilities: Sport increases social integration, improved self-confidence, and self-perception of young people with physical disabilities.²³⁴

Green Spaces: In a study from Australia, results suggest that up to seven per cent of depression cases and nine per cent of high blood pressure cases could be prevented if all city residents were to visit green spaces at least once a week for an average duration of 30 minutes or more.²³⁵

PERSONAL DEVELOPMENT

Enabling Skill Development: Engagement in sport increases enabling skills, including communication, collaboration, and time management.²³⁶

Female Leadership: 94 per cent of women in the C-suite played sports, 52 per cent at a university level and 74 per cent of executive women have reported feeling that sport accelerated their careers. Executive women are more likely to have played a sport and to hire other women who also played.²³⁷

Academic Outcomes: Research shows fitter children achieve better academic results and children who engage in **play** stay in school longer. There is a high correlation between playing sport regularly as child and higher lifetime earnings which is attributed to the life skills sport imparts on young participants such as teamwork, fair play, and resilience.

Impact on Cognition: Systematic studies demonstrate a relationship between physical activity and cognition and academic performance.²³⁸ The hypothesized mechanisms underpinning this relationship vary and include:

Increased energy derived from fitness

Productive diversion resulting from time away from classroom

Reduced disruptive behaviour

Improved cognitive functioning because of increased cerebral blood flow or improvement of brain neurotransmitters

A relationship between motor and mental skills and increased self-esteem²³⁹

Increased levels of norepinephrine and endorphins, resulting in a reduction of stress and an improvement of mood; and increased growth factors that help to create new nerve cells and support synaptic plasticity.²⁴⁰

Improved children's educational attainment, workplace productivity, reducing absenteeism and anti-social behaviours²⁴¹

Adaptability and Resilience: A study exploring the impact of organized sports and active recreation on student aptitude revealed the following:²⁴²

- Contributes to increasing self-reported adaptability and confidence in managing uncertainty and anxiety.
- Contributes to enhancing emotional awareness, sensitivity, and resilience of participants.
- Contributes to positively impacting student's relationships and sense of connection to others in their life.
- Contributes to mitigating fear and isolation.

IMPLICATIONS

Evidence shows that the active economy has direct and measurable impacts through enhanced physical and mental health and wellness. What is more difficult to ascertain is the role that the active economy has in developing the critical competencies essential for a modern labour force. To maximize the impacts, however, the Playbook recommends increased intentionality and focus on developing these competencies.

SOCIAL PROSPERITY



The challenge of social cohesion, **inclusion** and active citizenship is one faced by many societies. When exploring social impact, the Playbook focuses on three themes:

1. Social cohesion
2. Volunteering
3. Social identity

SOCIAL COHESION

Parks and Collective Efficacy: A two-year study of 65 neighbourhoods in Los Angeles County demonstrated an association between fixed physical features of neighbourhoods, parks, and personal rating of collective efficacy.²⁴³

Pedestrian-Oriented Neighbourhoods and Social Engagement: The Los Angeles based research found that **pedestrian-oriented**, mixed-use neighbourhoods are associated with increased familiarity with neighbours and greater social engagement. Moreover, other research found that walkable, mixed-use **neighbourhoods**

have higher levels of **social capital**, including knowing neighbours, participating politically, trusting others, and being socially engaged.²⁴⁴

Community Gardens: Eight separate studies found that community gardens increase community cohesion and reduce graffiti and violence.²⁴⁵ Further, community gardens improve the attitudes of residents and contributes to improvements to a neighbourhood, reduced littering and increased pride in the neighbourhood.²⁴⁶

Sport and Social Cohesion: Numerous studies provide evidence that sport contributes to building local skills, knowledge, and resources, increasing social cohesion, facilitating structures and mechanisms for community dialog, leadership development and encouraging civic participation.²⁴⁷

Sport and Social Capital: An empirical study of 21 countries demonstrates substantial correlations between measures of social capital and measures of sporting participation, both at the national and individual level.²⁴⁸

Contextual: A three-year ethnographic study of Somali refugees examines the role of sport in bridging and community bonding. The study concludes that sports could play a role in generating social capital within an immigrant community, however, the authors emphasize the contextual nature of this type of research and therefore, extrapolation of the results to other contexts is not valid.²⁴⁹

"An estimated 111,000 Calgarians volunteer a total of 14.8 million hours a year to active economy enterprises, primarily in organized sports, active recreation, and health and wellness."

SOCIAL IMPACT OF THE ACTIVE ECONOMY

111,000 

CALGARIANS VOLUNTEER

14.8 **hours**
MILLION

A YEAR TO OUR REGIONAL
ACTIVE ECONOMY

SPORT CONTRIBUTES TO

SOCIAL COHESION

AND A REDUCTION OF SOCIAL ISOLATION

MIXED-USE NEIGHBOURHOODS

ARE ASSOCIATED WITH INCREASED SOCIAL ENGAGEMENT



COMMUNITY GARDENS

ARE ASSOCIATED WITH INCREASED SOCIAL ENGAGEMENT

WELL-DESIGNED COMMUNITY
SPORT PROGRAMMING CAN

REDUCE YOUTH CRIME

VOLUNTEERING

Volunteering and Social Outcomes:

Volunteering supports the development of social networks and cohesion.²⁵⁰

Community Orientation: A nine-month UK study of young volunteers (aged 13-16) found an increase in measures of altruistic attitudes, community-orientation, leadership skills and feeling better about themselves.²⁵¹

14.8 Million Hours per Year: An estimated 111,000 Canadians volunteer a total of 14.8 million hours a year to active economy enterprises, primarily in organized sports, active recreation, and health and wellness.²⁵² This translates into 30 per cent of all volunteering in Calgary. The most critical age group for the active economy is 35 to 44 years. This group accounts for an estimated 30 per cent of volunteers.²⁵³ This may be because this cohort's children are engaged in active living, organized sports, and active recreation programming. An opportunity exists in expanding the pool of volunteers across different life stages. Younger people benefit from the personal development associated with volunteering, whereas older people benefit from the physical activity and social interaction.

CRIME/ SAFETY

The causes of youth crime are complex and multi-dimensional, however, evidence shows that organized sports programs provide young people with a positive identity, feelings of empowerment and by helping youth acquire leadership, team work, and self-governance skills under adult supervision.²⁵⁴ The catch phrase Sport – Not Court is appropriate here. In Alberta, Alberta Justice estimates the cost of housing a youth in a provincial facility is \$500 per day or \$26 million per year.

The City of Calgary is already exploring opportunities to implement the Iceland model otherwise known as Planet Youth. (<https://planetyouth.org/the-method/>)

Impact of Juvenile Crime

In Kansas City, evening and midnight basketball programs reduced the crime rate among African American youth. According to the Kansas City Police, there was a one-third to two-thirds reduction in juvenile crime in areas where there was a midnight basketball program for 10 to 21-year-olds.²⁵⁵

In Phoenix, basketball courts and other recreation facilities that were kept open until 2 A.M. led to a reported reduction in juvenile crime rates by up to 55 per cent.²⁵⁶

Similarly, in Alexandria, Virginia, there was a reduction in crime among young women who participated in a running program sponsored by the Road Runners Club of America.²⁵⁷

A multi-agency scheme in a Bristol youth centre, addressing problems of drug-taking and associated levels of criminal activity, claimed a 15 per cent reduction in crime in the local area and a 43 per cent reduction in juvenile crime.²⁵⁸

In the north-east of England, programming has been implemented that trains young people in youth/sports leadership awards, through supervised activities with recreational activities, organised and facilitated by trained young people. This program claimed a 40 per cent reduction of crime and a £200,000 reduction in vandalism.²⁵⁹

Gardens and Crime: Buildings with high levels of vegetation had 52 per cent fewer total crimes than buildings with low levels of vegetation.²⁶⁰

Car-Free and Crime: A US study found crime dropped 74 per cent when the community went car-free on weekends.²⁶¹

IMPLICATIONS

Evidence demonstrates that the active economy plays an important role in developing social cohesion and a strong sense of belonging. However, this evidence also suggests that there needs to be increased intentionality and targeted investment in resources to leverage the social impacts of the active economy. This includes a commitment to:

- Urban design and planning to promote increased walkability.
- Building and maintaining parks and open spaces.
- Expansion of community gardens.
- Leveraging of current infrastructure to promote increased usage by specific demographics.

ENVIRONMENTAL IMPACT OF THE ACTIVE ECONOMY



An urban forest can contribute to

reduced energy consumption

WALKING TO SCHOOL

EVERY 13% INCREASE IN

CAN CONTRIBUTE TO 1% REDUCTION OF A CITY'S CO₂ EMISSIONS.



reduce **CO₂ emissions** by 15%



A 5% increase in

walkability

reduces vehicle traffic by 6.5% and decreases nitrogen oxide by 5.6%

ENVIRONMENTAL PROSPERITY



Finally, an active economy has been shown to have links to environmental prosperity including active engagement in nature and its links to environmental stewardship.

These focus primarily on parks, however there is also value in developing active transit strategies.

IMPACT OF PARKS AND URBAN FORESTS

A Toronto Dominion study for the City of Toronto suggests that its urban forest provides residents with over \$80 million, or about \$8 per-tree, worth of environmental impacts and cost savings each year. For the average single-family household, this works out to \$125 in savings per annum. For every dollar spent on annual maintenance, Toronto's urban forest returns anywhere from \$1.35 – \$3.20 worth of impacts and cost savings each year.²⁶²

In a study from Washington State, the non-traditional economic impacts associated with green spaces includes the satisfaction and increase in general quality of life people get from engaging in outdoor recreation and from the ecosystem services recreational lands provide. The combined benefits are estimated to be between \$134 billion and \$248 billion annually.²⁶³

An international study looking at 25 urban centres identifies that investing in restoring, protecting, and enhancing green infrastructure and ecosystem services in cities is not only ecologically and socially desirable, but also economically viable.²⁶⁴

A study by the Inter-American Development Banks estimates that increasing tree cover by ten per cent may reduce the total energy needed for heating and cooling by five to ten per cent.²⁶⁵

"investing in restoring, protecting, and enhancing green infrastructure and ecosystem services in cities is not only ecologically and socially desirable, but also economically viable."

REDUCTION OF CO2 EMISSIONS

A study by the UA Environmental Protection Agency found that an increase of 13 per cent of walking to school reduces CO₂ emissions by 15 per cent.²⁶⁶

Another study found that 'Safe Routes to School' programs resulted in a 13 per cent reduction in vehicle drop-offs, and an annual reduction of 1,000 tons of carbon dioxide emissions and 70 tons of other environmental pollutants.²⁶⁷

Through the creation of parks, cities can also be addressing their **carbon footprint** by sequestering carbon from the air and soil, but also reducing local energy consumption by providing cooler surfaces and additional shade for buildings.²⁶⁸

A study in the Journal of American Planning identifies that a five per cent increase in walkability is linked to a 6.5 per cent decrease in vehicle traffic, equating to a 5.6 per cent decrease in emissions of oxides of nitrogen.²⁶⁹

IMPLICATIONS

Evidence demonstrates that the active economy can have a significant environmental impact by playing an important role in pollution and carbon emissions. This includes a commitment to Calgary adopting the **15-minute** City planning principles. The 15-minute city, is based on the need for all citizens being able to access all professional, work and leisure amenities within a 15-minute walk or cycle ride of their home.²⁷⁰ Outdoor recreation can also have a positive impact on the environment through an increase in preservation of urban forests. The active economy can also play a role on environmental sustainability through time spent in nature promoting environmental stewardship among both children and adults.

A challenge with many environmental impacts is the temporal distance between the intervention and the benefit. Environmental value and impacts are rarely immediate and must be measured over long periods. This makes investments that provide only environmental impact politically challenging although most, if not all of the activities that trigger positive environmental impact can also provide significant, and sometimes short-term measurable economic, human, and social impact.



7

TRENDS INFLUENCING THE FUTURE

Predicting the future with precision is an impossible task, however, for any movement, macro-level trends and the resulting implications must be considered. Being aware of the context, the global environment, and with thoughtful planning, it is necessary to indicate what is reasonably possible. Through the engagement process starting in March 2019, the project team identified seven macro-level trends influencing the future of Calgary and its regional active economy. Each trend is analyzed and factored into our strategic recommendations.

Trend 1: Social Justice and Change

Trend 2: The COVID-19 Longtail

Trend 3: Sustainability at The Centre

Trend 4: The War For Talent

Trend 5: Accelerating Technological Disruption

Trend 6: From Consumer To Co-Creator

Trend 7: Changing Media Consumption

It is important to remember that these trends are highly dynamic, and the descriptions provided are only a starting point for ongoing research and intelligence gathering to support evidence-based decisions at both the enterprise and system level. As such, Playbook 2030 is a “living” document that is to be revised as more clarity and new information becomes available. An accelerating reality, and an anchor principle within the active economy, is that the world is a complex system and therefore, it is essential to think bigger.²⁷¹ The challenge is that humans are inclined to break big problems down into small pieces. This simplification leads us to believe that a single cause has a single effect, which is very rarely the case. Therefore, planners must think about the entire system and recognize the first challenge is not problem solving, but rather, it is problem identification. Once great planners figure out the real problem, they can focus on exploring the solutions.

TREND 1: SOCIAL JUSTICE AND CHANGE



Many of the other trends resulting from COVID-19, such as technology, demographics, and media consumptions, are redefining the relationship between people and institutions. Over the past decade,

there has been a significant decline in trust of institutions such as government, media, corporations, and social enterprises. Amplified through mediums like social media, people’s values are framed by the echo chamber of others who share similar values and views. This creates an increased animosity or fear of others that may not look or think like you. Brexit, the 2016 American presidential election and Black Lives Matter are partial reflections of this fundamental breakdown in institutional trust. Edelman, a global public relations firm conducts an annual worldwide study on trust. In Canada, the following 2020 data reflects the social discontent society is facing:²⁷²

- 76 per cent are concerned about their job security
- 74 per cent believe there is a broad societal injustice in Canada
- 69 per cent have a desire to see social change in Canada
- 65 per cent do not have confidence that current leaders will successfully address the country’s challenges.
- 65 per cent want to be involved in shaping the future of Canadian society
- 62 per cent believe technology is moving too fast
- 53 per cent believe the current system in Canada is failing them
- 15 per cent believe the current system in Canada is working for them

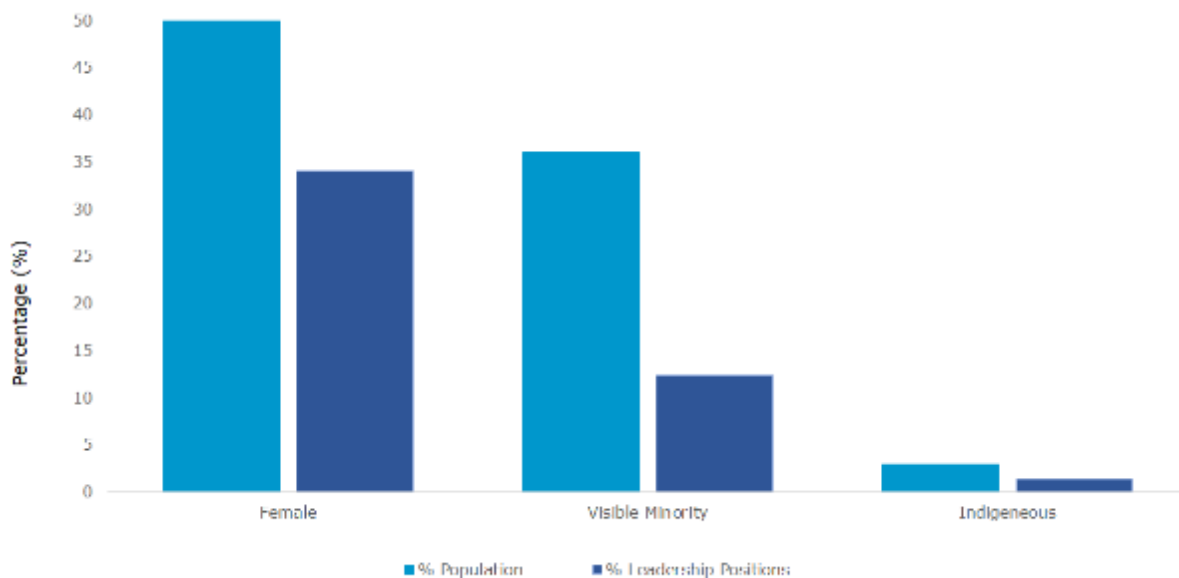


Figure 7.1: Systemic Inequality

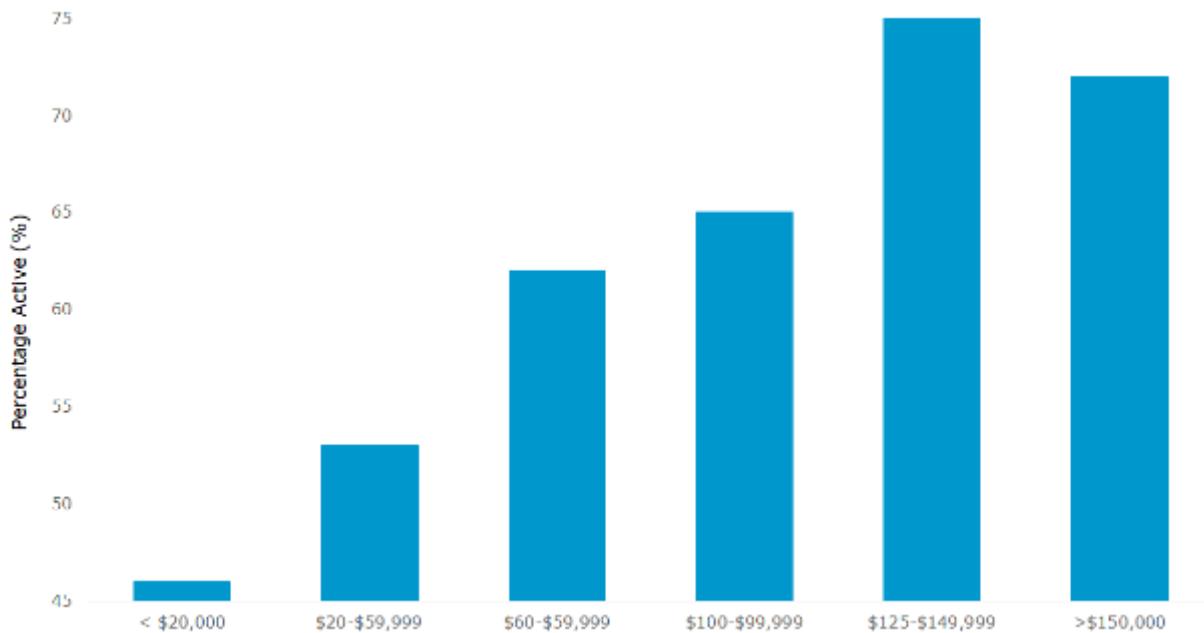


Figure 7.2: Per cent Active by Income

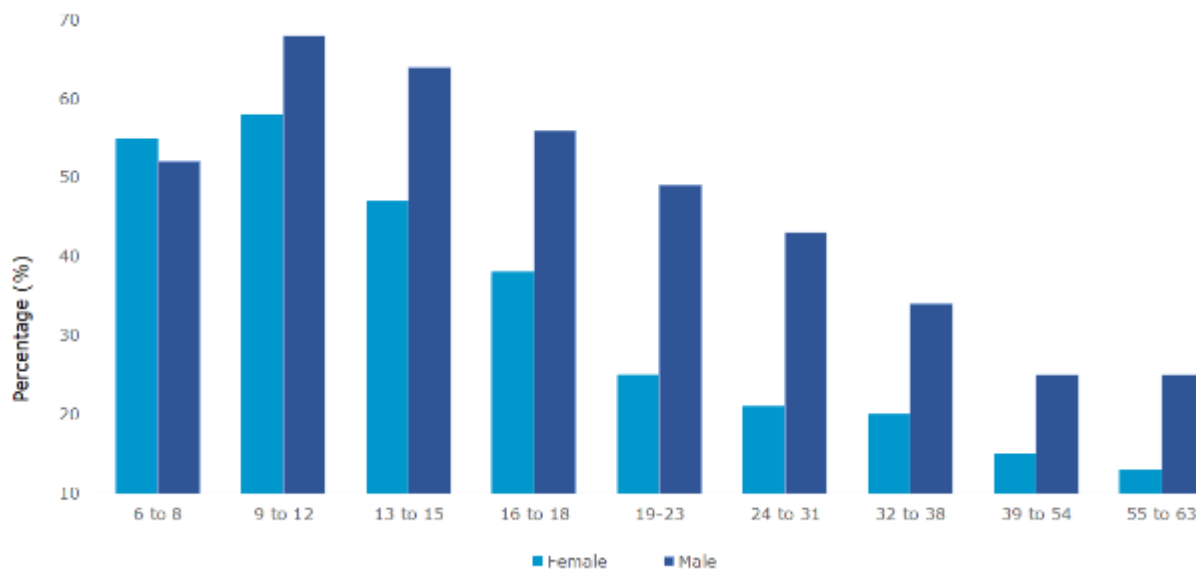


Figure 7.3: Per cent Active by Gender and Age

This data demonstrates the deep discontent in Canadian society and the demand for change. As a result, there are enormous movements occurring which aim towards confronting some of the core injustices in society, ranging from systematic inequality to the growing wealth gap. As a city and region, Calgary is not immune from this increasing demand for social justice.²⁷³

- 89 per cent of Calgarians are concerned about poverty.
- 96 per cent believe reducing poverty is important to the wellbeing of the city.

For example, in the past 20 years Calgary has emerged as the third-most ethnically diverse city in the country, yet much of the city's leadership does not yet reflect this. As per Figure 7.1, of 218

leadership positions surveyed in a study of Calgary boards, councils, elected bodies, and media, 34 per cent of positions are held by women, 12.4 per cent by visible minorities, and 1.4 per cent by Indigenous people. All are significantly below their proportion of the population.²⁷⁴

In the context of the active economy, there remains significant lack of equality, influenced by gender and income. As per Figure 7.2, income has a dramatic impact on participation in the active economy as a household with \$125,000 income is twice as likely to participate in the active economy, compared to someone earning under \$60,000. This is further amplified when considering the increasing cost of ticketed events. It must be recognized that in order for the active economy to be successful, it must be for all people.

"In the past 20 years Calgary has emerged as the third-most ethnically diverse city in the country, yet much of the city's leadership does not yet reflect this."

Moreover, as per Figure 7.3, female engagement in sport and active recreation decreases dramatically after childhood. In 2019, all Ministers responsible for sport at the federal, provincial, and territorial levels defined a commitment towards equal representation for women, and to have the proper services provided across all aspects of sport. To do so, the Ministers needed to recognize that there are a variety of factors predicting engagement. Higher household incomes are one factor, and girls who had parents or guardians who engaged in sport are three times more likely to engage in sport than their peers.²⁷⁵ Understanding these factors and acting to ensure they are addressed is crucial.

Furthermore, there is increasing recognition that those who identify as lesbian, gay, bisexual, trans (transgender), two-spirited, queer or questioning (LGBTQI2S+) face systemic challenges in Calgary and Canada. A 2015 study identified some of the systemic factors impacting engagement by the LGBTQI2S+ community in Canada in sport.²⁷⁶

- 81 per cent of respondents reported witnessing or experiencing homophobia in sport.
- 70 per cent of respondents believe youth team sports are not welcoming for LGBTQI2S+ people.
- 30 per cent of gay youth and 20 per cent of lesbians are worried about discrimination from coaches and officials.
- 44 per cent of gay youth and 48 per cent of lesbian are worried about being rejected by teammates.
- 66 per cent of respondents believe an openly gay, lesbian, or bisexual person would not be very safe as a spectator at a sporting event.

Though there is reported progress in welcoming LGBTQI2S+ into sport and active recreation, there is much more work that needs to be done in order to build a truly equitable active economy.²⁷⁷

Over the next decade, there will also be increasing focus on redressing the country's relationships with our Indigenous partners through the recommendations in the Truth and Reconciliation Report.²⁷⁸ This redress is not only at a legal and institutional level, but also from education, fulfilling careers, cultural vitality, entrepreneurship and strong family and community ties. Indigenous economic development is an integral component of reconciliation and holds the potential to fuel economic growth within Canada. This focuses on restoring cultural relationships by utilizing modern and traditional practices.

The Truth and Reconciliation Commission's Calls to Action (#92) identified respectful relationships, equitable access to opportunities, and education of non-Indigenous management as key components for economic reconciliation. With a young and growing Indigenous population, Indigenous economic development is a powerful and untapped resource for driving regional economic growth.

The opportunity to participate in sports, recreation and physical activity has a significantly positive impact on physical health, as well as the mental and emotional wellness of Indigenous youth. Sports and activity give youth a sense of purpose and direction, and, in some cases, helps them to engage in more appropriate activity during their free time while they find their way in the world. In the Truth and Reconciliation Report, sport and recreation are identified as tools for social

development to improve the health and wellbeing of individuals and communities. Sports are important to Indigenous communities, as it brings together individuals and communities who may experience loneliness and loss of family and community unity of the past. Sports provide opportunities for participation, inclusion, and responsible citizenship.

Over the next decade, there must be a focus on strengthening and increasing the existing local First Nation resources in an effort to generate economic wealth and the wellbeing among community members. Approaches to this may include:

- Strengthening the Indigenous language and culture
- Enhancing equity in funding
- Increasing access, retention, and graduation (postsecondary education and adult learning). Develop new pathways for access to higher education for Indigenous students.
- Addressing critical infrastructure needs in First Nations communities and providing new investments to support the ongoing operation and maintenance of this infrastructure.
- Foster respectful **partnerships** with Indigenous communities, governments, and organizations— developing and supporting educational and research programs that align community needs and priorities with First Nations’ strengths and capabilities. This includes identifying opportunities to share land-based educational practices with non-Indigenous communities
- Creating employment and opportunities for community members

- Investing in and managing community-owned businesses
- Bringing financial returns to the community to be used to benefit all community members
- Using community-driven approaches to improve quality of life
- Supporting projects that meet the community’s unique needs, traditions, culture, and vision
- Entering partnerships with other communities or industries to access new economic opportunities

IMPLICATIONS

Over the next decade, there will be increasing pressure and responsibility to deal with these core societal issues. This will accelerate a new approach in solving community problems through increasing harmonization of the commercial, social, and public sectors that will spawn social innovations. The result blurs the line between the role of commercial, social, and public sectors as innovation trumps traditional institutional silos.

An increasingly ethnic and culturally diverse population requires built infrastructure and programming. This includes balancing a need to build infrastructure that is in close proximity to unique communities, while simultaneously facilitating bridges between diverse ones. Evidence demonstrates that a well-designed active economy can facilitate community integration and social bonding. Practical examples could include flexible multi-use facilities (both indoor and outdoor) to meet the diversity of active living, organized sports, or active recreation demands.



Similarly, the aging population is having significant multi-dimensional impacts. Firstly, the impacts of aging can be reduced by a multi-component exercise program that focuses on improving strength, balance and/or flexibility.²⁷⁹ Yet, more than 90 per cent of men and women older than 60 are sedentary for at least eight hours a day²⁸⁰ and only 4.5 per cent of Canadians aged 60 to 79 accumulate 30 minutes per day of physical activity in the recommended 10-minute bouts.²⁸¹ As the population ages, this puts increasing pressure on the healthcare system.

In addition, an aging population impacts public revenues through a declining tax base as baby boomers retire. Simultaneously, this **demographic shift** creates increasing pressure for public investment to support an aging population. **Age-friendly communities** must consider a range of factors. This includes anticipating and responding flexibly to aging-related needs and preferences.

An aging population requires us to:²⁸²

1. Recognize this is a diverse group with wide ranging financial capacity and physical capabilities.
2. Recognize that the traditional concept of retirement is changing, and many seniors will remain active through work, volunteering, or school.
3. Increase the number of **barrier free** recreation facilities and improve mobility options.
4. Increase opportunities for physical and **social connections** to overcome risk of social isolation.
5. Among all of these groups will emerge opportunities for those who specialize in innovative ways

Like many cities, Calgary has not achieved true equality and appreciation for gender diversity. This is unfortunate, as evidence shows that companies with greater gender balance on their boards and executive teams perform better in a variety of metrics.²⁸³ The reality, however is that “women are overrepresented in low-paying occupations and underrepresented in high-paying ones.”²⁸⁴ Moreover, women with a university degree earn an average of 90 cents for every dollar earned by men. Today, only six per cent of CEOs of large companies in Canada are women and 80 per cent of board positions are held by men.²⁸⁵

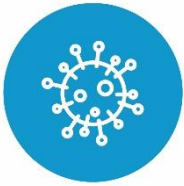
The active economy transcends the commercial, social and public sector, however, these sectors in Calgary have had limited levels of collaboration or harmonized system-level planning. To move forward, these sectors should work together to maximize the value of scarce resources. This includes rethinking how the ecosystem builds and designs active infrastructure. It also leads to a significantly increased demand for investment in the structural and social capital required to ensure the diverse stakeholders in and outside of the active economy are better coordinated. Part of this reframing is a focus on aligning investments towards defined metrics. Active economy enterprises must demonstrate how an investment in their enterprise creates not only value for the enterprise, but more so to the community. The ability to develop evidence-based quantitative and qualitative models, evidence and narratives that can link investments to outcomes is a minimum requirement regardless of the source of funding.

Consistent with this, it contributes to the expansion of Corporate Social Responsibility (CSR) and Corporate Social Innovation (CSI) initiatives. Strategic assets here may offer a sustainable competitive advantage on the same level of other assets such as intellectual property (e.g. patents) and brands. CSI is about groundbreaking ideas that take social, economic, and environmental sustainability to the next level. Continued pressure may result in a shift to a CSR and CSI strategy that combines corporate assets in collaboration with other sectors and firms to co-create solutions for complex social, economic, and environmental issues.²⁸⁶

The combined concerns regarding sustainability and associated economic pressure has numerous direct and indirect impacts on the active economy. The most obvious impact is an increased demand for innovative approaches to introduce active transportation options. Though Calgary may have the most pathways of any city in North America, it simultaneously has one of the lowest rates of active transportation in the country.

“To move forward, these sectors should work together to maximize the value of scarce resources. This includes rethinking how the ecosystem builds and designs active infrastructure.”

TREND 2: THE COVID-19 LONGTAIL



In March 2020, the spread of COVID-19 resulted in the closing of all non-essential organizations in Alberta. The result was 361,000 Albertans losing their jobs and another 330,000 employees working zero hours in April.²⁸⁷ Alberta's unemployment rate was 15.5 per cent in May.²⁸⁸ One of the hardest hit sectors was the active economy.

Some active economy enterprises were able to pivot their business models fully or partially, while most suspended operations, hoping to reopen when there was a return to 'normalcy'. Those who adapted their programming varied from altering their distribution to reassessing the sustainability of their entire business model. Many enterprises from organized sports, to active recreation, active tourism, health and wellness, and retail, however, were forced to close. Sport for Life conducted a survey of enterprises within the sport and recreation sector and found that 73 per cent of enterprises were temporarily closed and only 24 per cent were able to pivot and still offer services.²⁸⁹

The unprecedented COVID-19 conditions forced active economy enterprises to evaluate their 'offer and deliver' value to customers in new and innovative ways, including virtual live experiences sometimes referred to as the no touch active economy. As the economy reopens, many of the government-directed guidelines and policies alongside public health authorities include the implementation of physical distancing guidelines. For the active economy, these changes are increasing operating costs, reducing traditional revenue opportunities, and fundamentally altering the customer experience. For instance, the capacity of many restaurants is as low as 40 per cent of their pre-pandemic capacity due to physical distancing.²⁹⁰ Furthermore, professional and university sports remain closed to live audiences due to the challenges of adhering to physical distancing guidelines. As a result, the Conference Board of Canada is forecasting a 40 per cent contraction in Calgary's accommodation and food services sector in 2020.²⁹¹

There is also the fundamental question of whether entire sectors of Calgary's active economy are sustainable. Of particular concern are the two-thirds of active economy enterprises with less than five employees that possess limited liquidity to sustain extended financial disruption. As evidence of this, only 17 per cent of small businesses in Alberta are seeing sales in June recover to pre-pandemic levels.²⁹²

For active economy enterprises that rely on the in-person experiences, early stage research in Calgary suggests that citizens will remain cautious to re-engaging, with many suggesting that they will wait until a vaccine is available.

"As evidence of this, only 17 per cent of small businesses in Alberta are seeing sales in June recover to pre-pandemic levels."

IMPLICATIONS

The long-term fallout for COVID-19 remains unknown. Therefore, the first main implication is for us to track behavioural change and understand how the pandemic has impacted the active economy as a whole. The *ActiveCITY* Collective anticipates that the implications on the active economy will be far reaching.²⁹³

Operational Implications: This includes operational implications in regard to sanitization and hygiene and financial impact through reduced access to private or public funding. Moreover, there will be additional organizational implications as a result of COVID-19 tied to risk management systems and insurance. In some cases, the market dynamics may lead some of these enterprises to fully exit a business model that requires physical interactions. In other cases, enterprises may see a path forward that blends both touch and no touch offerings into a unique and compelling value proposition. Finally, the path forward for some active economy sectors may be identical to the path that got them here. What is needed is patience, financial prudence, planning, and a focus on short and long-term sustainability.

Facility Design: Facility infrastructure will need to be far more flexible than it is today. This will include smaller spaces for smaller group activities and designing egress to provide great physical distancing. An outstanding question remains regarding the large sport venues and the impact of COVID-19 on longer-term demand.

Employment Mobility: COVID-19 demonstrates in some sectors that physical co-location is not essential for certain roles. This impacts the assumption that an enterprise's workforce must be physically in the same geographic area. The result will be skilled workers having greater flexibility in choosing a place to reside. For example, a software designer who is an avid skier may choose to live in a mountain town, while working for a company based in a major urban centre. In some sectors and professions, this level of flexibility has existed for years, but the acceleration and expansion triggered by COVID-19 changes the calculations for many enterprises and employees in Calgary. As a result, Calgary may become more or less appealing to different people depending on their values. An opportunity exists to position Calgary's regional active economy as a competitive advantage for the attraction and retention of talent.

TREND 3: SUSTAINABILITY AT THE CENTRE



The environment and the sustainability of it are not new trends. However, driven by the effects of climate change, ranging from increasing forest fires and flooding, sustainability is a priority at the federal, provincial, and municipal levels.

Broadly speaking, sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. This definition recognizes that development is essential to satisfying human needs and improving quality of life, but that it must be based on the efficient and responsible use of natural, human, and economic resources.²⁹⁴ As per Figure 7.4 and 7.5, Calgarians identify areas related to sustainability, such as walkable communities and open spaces, as some of the leading sources of concern.²⁹⁵

"COVID-19 demonstrates in some sectors that physical co-location is not essential for certain roles. This impacts the assumption that an enterprise's workforce must be physically in the same geographic area."

IMPLICATIONS

The combined sustainability and associated economic pressures for Calgary have numerous direct and indirect impact on Calgary's regional active economy. A changing climate may impact the ability to reliably deliver certain active experiences. The impacts could extend across different snow or water-based sports. Similarly, the sustainability of certain active infrastructure may be challenged. This may include artificial snow-making and indoor pools. Another potential impact is the use of land for recreation purposes. Will areas be built purposefully for specific activities or persons from specific demographics and or socio-economic groups or will land be more multi-purposed in nature and inclusive in those that can use it?

This will also accelerate the adoption of the 15-minute city principle for city planners. The adoption of a 15-minute city will have seismic implications on Calgary. What is needed then is greater integration of public transit and micro-mobility options, including innovations in year-round cycling and e-bikes. Moreover, the increasing pressure for densification demands more efficient use of open spaces to support a broad range of activities from sports, active recreation, and community gardens. This already appears to be occurring.

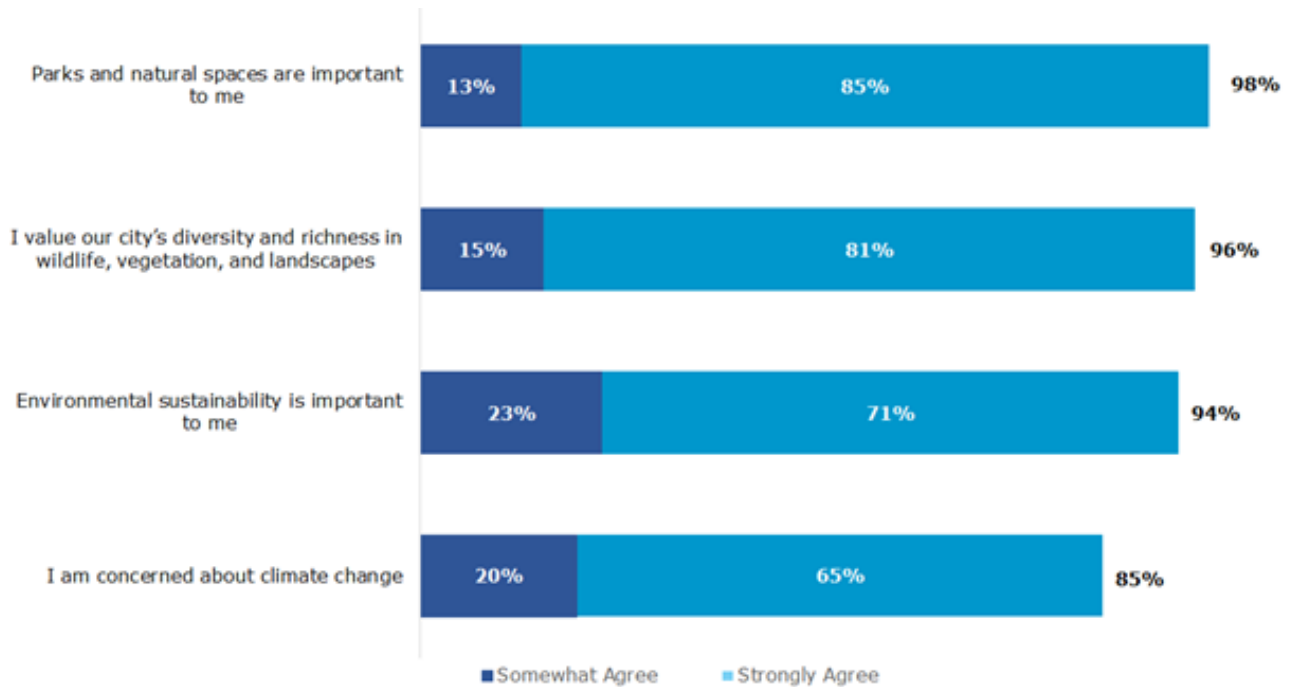


Figure 7.4: What areas are in the greatest need of attention in creating a sustainable future for Calgarians?

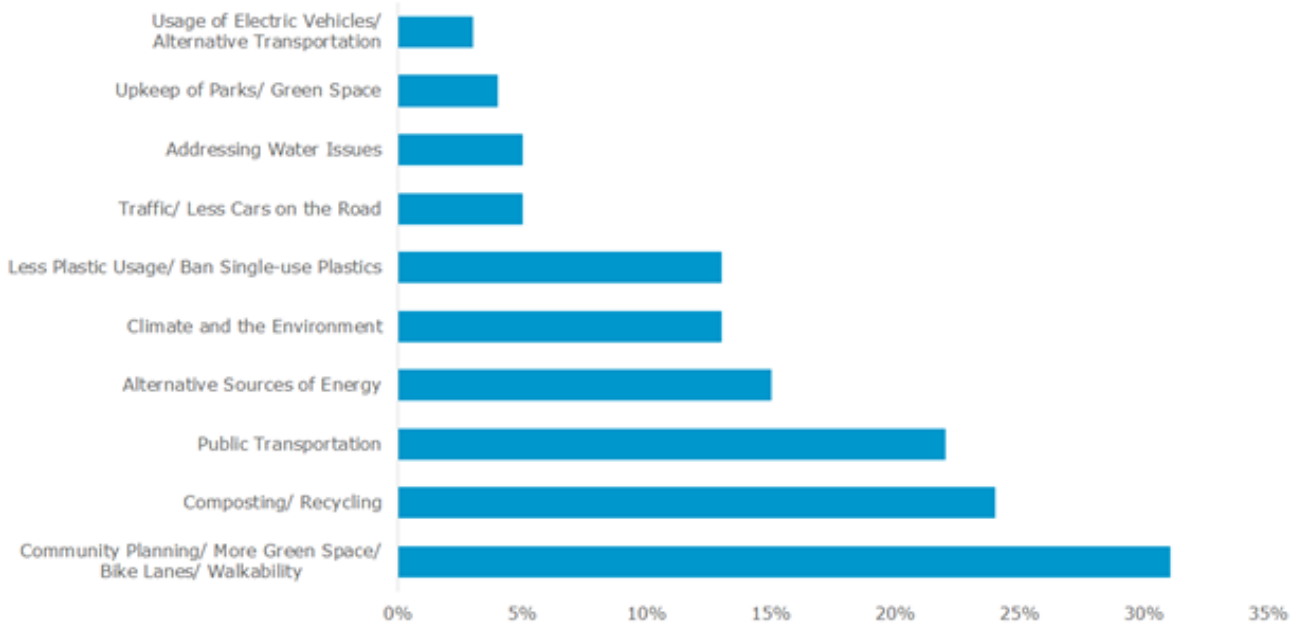


Figure 7.5: What areas are in the greatest need of attention in creating a sustainable future for Calgarians?

TREND 4: THE WAR FOR TALENT



For most of human history, a city's competitive advantage was defined by its proximity to scarce natural resources such as lumber or access to navigable waterways.²⁹⁶ For the past two hundred years, these natural advantages have contributed to the growth of cities through commodity extraction or manufacturing centres. Over the past four decades, the competitive advantage of many cities, driven by economic, social, and cultural factors, such as advanced technology and globalization, has transitioned from proximity to natural resources, to the ability to attract and mobilize human capital. Human capital views competencies as capital, similar to other forms of capital (e.g., financial capital, social capital). Human capital can be viewed at the level of an individual, institution (e.g., enterprise or ecosystem) or city. Thus, today, a city's capacity to develop, acquire and retain high-valued talent underpins much of its economic and social prosperity.²⁹⁷ This is defined as the war for talent.

How will talent be defined in the future? The exponential pace of change in many sectors of the economy, has transitioned the war on talent from one of domain-specific skills. Domain specific competencies incorporate the knowledge, skills, attitudes, values, and behaviours required to complete specific tasks associated with a role (e.g., coding, welding, engineering) and/or a sector (e.g., energy, sport). However, today, employers are searching for people who can adapt and pivot in a constantly dynamic environment.²⁹⁸ For example, the World Economic Forum forecasts that by 2022, 75 million jobs will be displaced across the leading 20 economies, while 133 million new jobs will be created in nascent sectors. It is estimated that between 2018 and 2022, 50 per cent of employees globally will need to be reskilled or upskilled (Refer to Table 7.1).²⁹⁹ In Calgary, Calgary Economic Development forecasts that half of the jobs performed by Calgarians today could be at risk of automation over the next 20 years.³⁰⁰ Not surprisingly then, 91 per cent of human resource decision-makers view an employee's ability to adapt as a critical competency.³⁰¹

Adaptive capacity is the ability for an individual to anticipate systematic changes and proactively develop new or refine existing competencies that are valued as demand changes. Adaptive capacity is rooted in possessing enabling competencies. Enabling competencies (also referred to as meta-skills, human-skills, soft-skills, and transferable-skills) is the ability to incorporate knowledge, skills, attitudes, values, and behaviours required to deliver analytical thinking, interpersonal communication, foundational literacies, and professional competencies across a range of contexts.

Related to this has been the increase of what is referred to as the "gig economy". Today in Canada, 21 per cent of the workforce (and almost 40 per cent in the U.S.) is made up of freelancers who work for themselves.³⁰² That is more than 4 million people and growing by ten per cent each year.³⁰³ This freelance economy has become mainstream as companies and talent alike recognize the benefits of employment on-demand.³⁰⁴ It is too early to tell how COVID-19 may impact the gig economy, but it is a trend that will continue to evolve over the next decade as both enterprises and individuals look for more flexible work options.

Table 7.1: World Economic Forums Competencies Forecasts³⁰⁵

Increasing Demand	Decreasing Demand
Analytical thinking and innovation	Manual dexterity, endurance, and precision
Active learning and learning strategies	Memory, verbal, auditory and spatial abilities
Creativity, originality, and initiative	Management of financial, material resources
Technology design and programming	Technology installation and maintenance
Critical thinking and analysis	Reading, writing, math, and active listening
Complex problem-solving	Management of personnel
Leadership and social influence	Quality control and safety awareness
Emotional intelligence	Coordination and time management
Reasoning, problem-solving and ideation	Visual, auditory and speech abilities
Systems analysis and evaluation	Technology use, monitoring and control

IMPLICATIONS

This war on talent has two direct implications on the active economy. Firstly, there is a demand to evolve the current labour force to meet emerging needs. The development of high-valued talent incorporates both enabling competencies and domain specific competencies.

The development of these competencies has traditionally been developed through two mediums: (1) Formal education, encompassing accredited and non-accredited training that contribute to the development of an individual's cognitive and personality resources; and (2) through lived experience, including, professional (e.g., paid), volunteer (e.g., not compensated work) and contextual (e.g., personal experiences, such as travel). The development and refinement of these competencies is also an iterative and nonlinear process, incorporating feedback loops through education and experience. This then provides Calgary an opportunity to leverage its active economy as a strategic asset to develop demanded competencies that contribute to the city's economic growth and prosperity.

Evidence shows that engagement in both organized sports and recreation contribute directly to the development of valued competencies ranging from interpersonal to leadership skills. However, the relationship between developing high-demand competencies and an individual's participation in sport and recreation is largely informal. This then provides Calgary an opportunity to leverage its active economy as a strategic asset to develop demanded competencies that contribute to the city's economic growth and prosperity.

The second implication is the ability to leverage the active economy for talent acquisition. Many Calgarians were attracted to (or remained in) Calgary due to the robust active economy. This includes natural assets such as rivers, mountains and built assets, such as extensive pathway system. Unlike cities such as Melbourne, Austin, Vancouver, or Copenhagen, however, the active economy for Calgary, at best, has been used as an ad hoc asset for talent acquisition. The *ActiveCITY* Collective argues that there is an untapped opportunity to develop and leverage the active economy as a foundational asset for the acquisition of talent that is essential for economic diversification and growth.

"This then provides Calgary an opportunity to leverage its active economy as a strategic asset to develop demanded competencies that contribute to the city's economic growth and prosperity."

TREND 5: ACCELERATING TECHNOLOGICAL DISRUPTION



In the past two decades, technological innovation has disrupted society. The internet, social media, mobile devices, and **big data** analytics are only the tip of the digital iceberg. In the future, wireless connections will be built specifically to keep up with the "Internet of Things." The internet and other innovations from social media to mobile devices to big data have redefined the way society produces and consumes media. Currently, there are close to 30 million smartphone users in Canada, increasing to 33 million by 2024.³⁰⁶ A study of US children and teenagers ages 8 to 18 years, found tweens spend five hours a day on screens and teenagers 7.5 hours per day.³⁰⁷

In 2025, with the rapid advancement of the "internet of things," it is estimated more than 50 billion devices—from your car to your refrigerator—will be connected. Ericsson is predicting 90 per cent of all devices will have mobile broadband capability by 2022.³⁰⁸

Advancements related to artificial intelligence, machine learning and cognitive computing are also going to change lives and careers. But how? Over a decade ago when the first Nintendo Wii was introduced, the world had a glimpse of the potential of immersive computing. Computing is no longer a passive activity, rather it is evolving with the potential to be active. The next decade may see explosive growth in immersive visual computing, such as virtual and augmented reality (AR/VR), which may be a technological game changer for the active economy. Today, 70 per cent of the top VR apps use video. Sports such as

boxing and mixed martial arts are anticipated to be the most appealing in the near-term for VR.

Over the next decade, audiences' expectations of content will continue to be redefined. For example, new 360-degree cameras enable the production of three-dimensional virtual reality video with surround sound to allow a viewer to move within a video wearing a headset.³⁰⁹ There will also be significant technological advancements in neuro-coaching and machine medicine. This could include non-invasive brain stimulation to accelerate muscle memory and precision, brain scanning technology to manage cognition and emotion, supplements to accelerate reaction time, immersive visual computing training, RFID tags to track performance, and implantable sensors to monitor blood and technology to help people sleep better.

"Driven by these technological advancements in addition to increased social networking and video streaming, the global gaming market exceeds two billion participants or 30 per cent of the world's total population."

Driven by these technological advancements in addition to increased social networking and video streaming, the global gaming market exceeds two billion participants or 30 per cent of the world's total population.³¹⁰ In competitive esports, there were an estimated 110 million competitors in 2018.³¹¹ For perspective, a video game released in 2019, Red Dead Redemption 2 generated \$725 million in sales in its first three days. If Red Dead Redemption 2 were a movie, it would rank as the third largest box office opening in history; larger than any Star Wars or Harry Potter movie.³¹² In fact, three of the top five "opening weekends" in history are held by games, not movies. The growth of esports is also represented by the size of the prize pools, which now rival prize pools from the largest professional sports in the world from Wimbledon to The Masters (Refer to Figure 7.6).

Another technological disruption is the advances in battery technology. This contributes to continued advancement in e-transportation, including electric bikes and vehicles.

Finally, most analysts believe autonomous transportation contributes to the redefining of transportation.³¹³ The positive from this is increased efficiency and reduction of traffic accidents; the negative is the loss of millions of jobs for trucking, taxi and public transportation sectors.³¹⁴ Autonomous vehicles, combined with active transportation, could then redefine transportation networks and patterns of movement which could then have significant impact on broader city level planning.

IMPLICATIONS

The variety of technological advancements discussed here creates both opportunities and threats to the active economy. For example, the explosion of smartphones and other devices has led to the exponential increase in "screen time" and concurrent decrease in participation in organized sports and active recreation. Today, studies suggest that over 80 per cent of parents believe that screens are negatively impacting their children from engaging in other activities.³¹⁵ Technology has led to children growing up in an environment where inactivity has become the norm. For example, it is estimated children spend 50 per cent less time outside playing compared to their parents. Children must be engaged much earlier on the importance of active living in schools and at home. Creating an active living culture is imperative to overcome the rise of technology.

In addition, each device generates data that is used to predict behaviour and reveal preferences. In other words, every credit card transaction, click on Google, Instagram post and GPS ping from your smartphone generates data that is collected and used by enterprises to increase efficiencies, lower costs, accelerate decision-making, and increase customer satisfaction. The use of this 'big data' will continue to grow over the next decade as the volume, velocity and variety of data grows in influencing critical decision-making in the active economy. However, one implication on society as a whole, and the active economy specifically, is increased risk to privacy and its implications. In the active economy, this may range from financial transactions to personal information and health records that are shared and at risk for being used by others. The ability for enterprises in the active economy to protect and secure this data is therefore of increasing importance.

Other impacts of technology on the active economy can include micro examples such as the continued advancements in e-bikes. There is the potential for these to enable seniors to cycle and remain active for an extended period, offering both health and environmental impacts.

- Implications of wearable technology - Body suits/wearables – see the change in HR or cadence; greater understanding about what is actually occurring in the game.
- Greater data on one’s performance as a runner, athlete.
- Technology has moved people to think differently and disrupt sport; offer a fresh perspective.
- To thrive we will need to embrace the change and disruption and resist the urge to stay static.
- Esport is global and possesses the ability to connect and engage fans easily. It is social, interactive, and **accessible** – a real threat to traditional sports.
- Implications for online learning and online delivery of services via digital buying.

TREND 6: FROM CONSUMER TO CO-CREATOR



Traditional innovation processes focus on controlling innovation which allows a company to retain ownership of and control over knowledge and intellectual property. In other words, this is the exploration of new knowledge and exploitation of existing knowledge in a closed loop and limited to employees within an enterprise. Traditional innovation, however, has limited access to knowledge from external sources and therefore an enterprise is challenged to effectively tackle the most complex problems. In contrast, open innovation encourages the development of partnerships and the leveraging of complementary knowledge for innovation from individuals and enterprises across ecosystems. This model, adopted by companies such as Apple, Google and LEGO, recognizes that when you empower people, you accelerate innovation. In this model, an enterprise transitions from being a linear controller of knowledge to becoming a dynamic broker across the entire ecosystem and supporting interconnected processes. Over the next decade, the role of the active economy

consumers and other stakeholders will expand dramatically as the system transitions to the open innovation model just described.

Other changes that will impact the active economy include the democratization of participation. Linked to the shift below, the definition of an athlete is evolving (e.g. esport) as is the understanding of who a ‘reporter’ is, with many having access to a phone camera and social media. The changing world of communication, connectivity, and collaboration allows one to connect with anyone on the planet anywhere, at any time. One implication for the active economy is that people are now looking for immediate access to highlights, and post-game press conference and not just the game.

“Traditional innovation, however, has limited access to knowledge from external sources and therefore an enterprise is challenged to effectively tackle the most complex problems.”

IMPLICATIONS

The active economy needs to learn how to engage consumers throughout the product lifecycle. This is of particular importance within the active economy with significant declines being seen in the participation of women, lower household income, persons with a disability and specific ethnic groups. As noted earlier, seniors are also a significant and critical part of the active economy and meeting their diverse and emerging needs is essential. Similarly, a variety of enabling sectors within the active economy should adopt an open innovation framework as they evolve their products and services.

Enterprises and ecosystems that have successfully developed open innovation systems have done so systematically. This includes the tangible and intangible processes and structures that facilitate effective collaboration and harmonization of individuals and institutions. At this stage, with no shared vision or purpose, the active economy lacks the core structural capital that underpins the capacity to aggregate individuals and enterprises into one system. Instead, most mechanisms

remain limited internally to enterprises, with only limited examples of aggregation at the ecosystem level. The result is risk of system-level duplication and inefficiencies. The foundation of a shared vision for an active economy, instead should be the commitment to develop the required structural capital for Calgary's regional active economy to work as a harmonized system. The anchor should include establishing mechanisms for system-wide knowledge mobilization, harmonized experiments and shared open resources.

TREND 7: CHANGING MEDIA CONSUMPTION



Between 2009 and 2019, media advertising revenues almost doubled in size globally from \$1.2 to \$2.1 trillion. Ironically, the fragmentation of media, has led to a concentration of advertising revenues as both Google and Facebook control one-fifth of all advertising revenue globally.³¹⁶ This disruption of media's financial model also extends into the active economy, where broadcasters are struggling to monetize sport content to balance the huge rights fees. Sport continues to be one of the dominant forms of media content in Canada, with 24 per cent reporting they watch live sports daily. 42 per cent consume sports through television. However, one-third of Canadians consume sports content online (through a variety of media such as online clips, articles, and live-streamed broadcasts), but only three per cent subscribe to a dedicated sports streaming service.³¹⁷

Concurrent with this financial disruption, technology has transformed how society consumes media, forms opinions, and makes decisions. For example, active economy media consumers are no longer at the mercy of broadcast schedules. They can increasingly watch and listen to the programming they want when they want. The result is that people digest bite-sized stories in Tik Tok or YouTube and often, consuming multiple screens simultaneously.

Studies suggest that how society processes information is changing as society adapts from text to video or other forms of content. Some consumers want to dig deeper than those few seconds; but many may not. For example, some

may simply read a headline, whereas others watch embedded video and follow links to related stories. Today, more so than ever, the medium really is the message.

An additional implication of this changing media landscape is developing shorter-length versions of traditional sports such as Rugby Sevens, 20/20 cricket matches, and three on three basketball and 12-hole golf courses.

Moreover, user-generated content such as social media posts or online reviews becomes increasingly valuable as trust in brands and large institutions (including governments) is displaced by trust in people. This dynamic has massive implications on how people are influenced and behave. Our reliance on recommendations from trusted friends and family is growing with a study by the Pew Research Centre showing that 40 per cent of American adults define Facebook as a primary news source. In fact, according to BuzzFeed, the top 20 best-performing fake news stories of the 2016 U.S. election shared on Facebook had higher readership than the top performing election stories in the *New York Times*, the *Washington Post*, *Huffington Post* and *NBC News*. In Canada, 60 per cent of the population use Facebook daily and 21 per cent define it as their first source of information. Interestingly, this transcends age groups with 49 per cent of those 60 years and older reporting using Facebook daily.³¹⁸

"Twitch averages 2.2 million daily broadcasters or streamers and 15 million daily viewers; 41,000 concurrent broadcasters /streamers and 1.1 million concurrent viewers."

Twitch has also emerged as a potentially game (no pun intended) changing media platform that may provide a guide to the future of the active economy media. Twitch, owned by Amazon, is a platform that allows you to watch others play video games.³¹⁹ The scope of Twitch is difficult to comprehend. Twitch averages 2.2 million daily broadcasters or streamers and 15 million daily viewers; 41,000 concurrent broadcasters /streamers and 1.1 million concurrent viewers

(CCV).³²⁰ At peak hours its CCV numbers outpace some of the top-rated US cable channels, such as CNN and MSNBC.³²¹ In Alexa's ranking of global websites, Twitch is just behind Netflix and LinkedIn at number 26.

As a platform, Twitch streamers have launched their own channels, and with a webcam and headset microphone, livestream themselves playing games and offering commentary for audiences. Twitch then uses algorithms to make content suggestions to users, facilitating navigation. Twitch is also interactive, allowing viewers to comment or ask questions in a chat sidebar, and streamers in turn can react to the posts. Furthermore, Twitch has built features into the program to monetize viewer interests. This includes traditional advertising and sponsorship, but also opportunities for viewers to make donations to the streamers they follow. As part of the interaction that occurs, streamers offer to complete certain tasks or play certain games in exchange for contributions. Streamers can also draw revenue through a base subscription to their channel for a fee that then allows subscribers to comment in the channel's chat.

IMPLICATIONS

The changing media landscape is having a similarly significant impact on the active economy as television did in the 1950s. Short-form and user-generated media, such as Twitch or Tik Tok, does not spell the end of long-form storytelling in sport, but it will continue to redefine it over the next decade. Advancements in technology has also triggered a hyper-social generation with unique values and demands. Many younger fans follow the star player, and not necessarily a team, and these younger fans feel connected to the players. This connection may be through social media, fantasy sports or real-time content off the field. Most fans will not sit for three hours to watch a game but want bite-sized content they can control on their own terms.

Therefore, story forms, promotional or otherwise, will continue to adapt and evolve from single form to transmedia storytelling where the consumer is able to seamlessly shift from text, video, audio, and images and potentially simultaneously with multiple-screen consumption. Future media will involve telling multiple stories, with each one working as a standalone or with associated pieces. For example, through television, radio and the

internet, the NHL uses hockey players to tell continuous stories. Some are short term such as single games, a fight, comebacks, or trade speculation. Others are drawn out over a longer period, such as a player's career, the Stanley Cup playoff run, or a team's rebuilding efforts. All of these narratives are built and shared using transmedia storytelling which enables the media producer to customize the message or story elements for the channel and the audience who consume it.

For Calgary's active economy, the expansion of transmedia storytelling, offers a new and innovative platform for both enterprises and the ecosystem. The organic and user-generated model can be leveraged to tell more compelling students, educators, and athletes.



8

BEING INSPIRED

Playbook 2030 is designed with one goal – to transform Calgary into Canada’s most livable region by leveraging our natural competitive advantage – our active economy. This section will review the inspiration used to drive our active economy strategy. This includes:

Being inspired by Calgarians: Being inspired by 23,000 Calgarians and their vision of the regional active economy.

Being inspired by the world: Being inspired by leading case studies across Canada and the world on what is possible.

Being inspired by our own innovators: Being inspired by the innovation driving Calgary’s active economy forward in 2020.



WHAT CALGARIANS THINK

The goal of the *ActiveCITY Playbook 2030* was to invert the planning process and listen to the diverse voices of Calgarians. Over the past 18 months, the *ActiveCITY Collective* proactively engaged a broad cross section of citizens to ensure a diversity of perspectives. Since March 2019, the *ActiveCITY Collective* engaged over 23,000 citizens to support *Playbook 2030* planning, making this among the largest public engagement exercises in the city’s history.

Engagement took three major forms; prior to the pandemic, *ActiveCITY* was hosting a series of face-

to-face workshops. With COVID-19 making workshops impossible, we migrated to weekly virtual engagements between April and October 2020. Lastly, we leveraged the vast reach of our active ecosystem partners to distribute a variety of *ActiveCITY* surveys to their members.

The following page provides an overview of the major themes that emerged from this consultation.

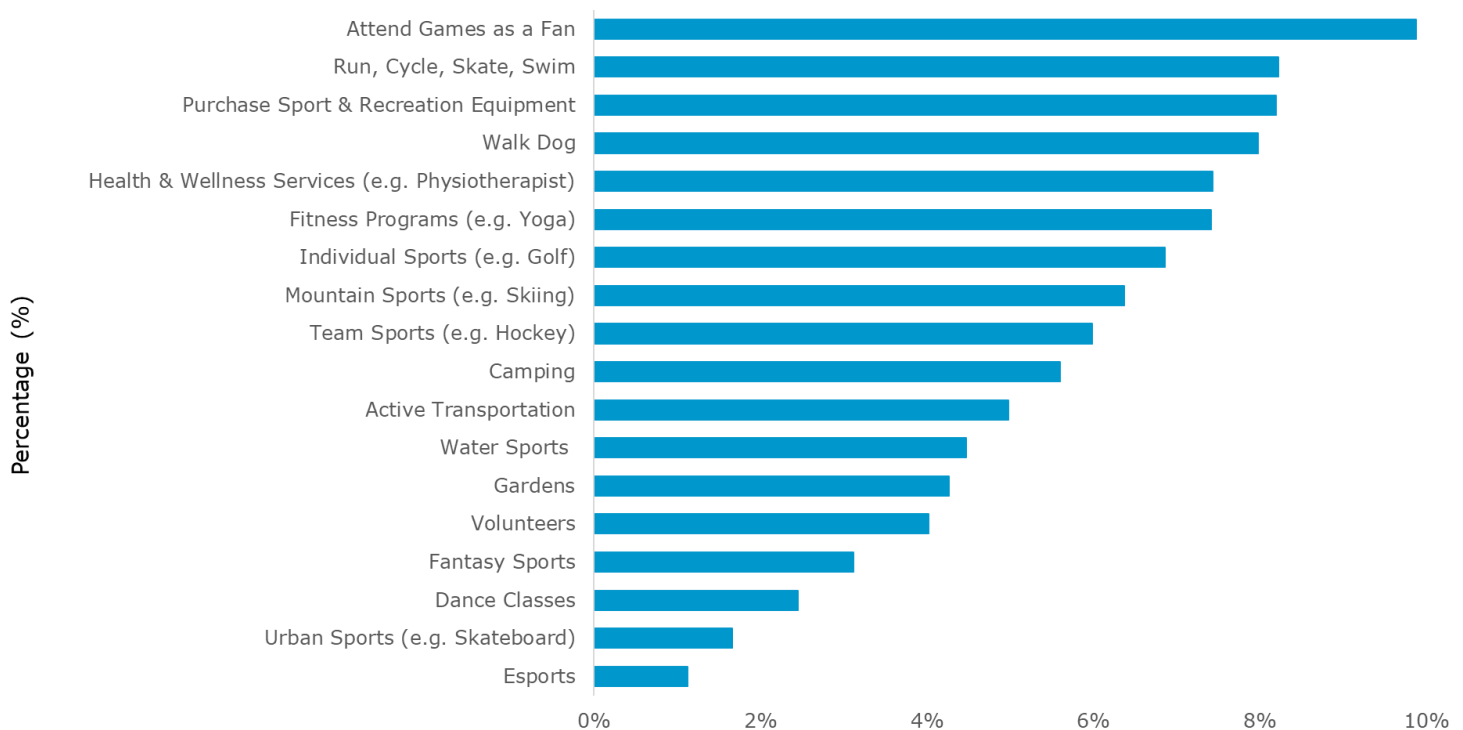


Figure-8.1: Engagement in Active Economy Today (Proportion of Total Mentions)

WHAT CALGARIANS THINK



23,000

CALGARIANS ENGAGED
OVER 18 MONTHS

WHY DID YOU CHOOSE CALGARY?

1. FAMILY & FRIENDS
2. CAREER OPPORTUNITIES
3. SAFE COMMUNITY
4. ACTIVE OPPORTUNITIES

HOW CAN WE IMPROVE LIFE FOR CALGARIANS?

1. STRENGTHEN OUR
ECONOMY
2. DESIGN WALKABLE
AND CONNECTED
COMMUNITIES

WHAT MAKES CALGARY SO ACTIVE?

1. THE RIVERS
2. OUR PATHWAYS
3. OUR PARKS
4. THE MOUNTAINS
5. OUR SPORTS TEAMS

HOW DO WE BECOME THE BEST?

1. BECOME THE BEST CYCLING
CITY IN NORTH AMERICA
2. CONNECT AND EXPAND OUR
PATHWAY SYSTEM
3. EXPAND OUR PARKS AND
GREEN SPACES
4. ENSURE ALL CALGARIANS
CAN AFFORD TO PARTICIPATE
5. DESIGN PROGRAMS AND
INFRASTRUCTURE FOR OLD
AND YOUNG
6. WE ARE WINTER. OWN IT.

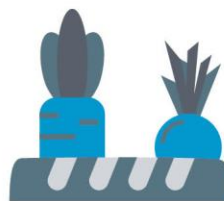


72%

DEFINE THEMSELVES
AS ACTIVE TODAY

82%

BELIEVE CALGARY IS
AN ACTIVE CITY



CALGARIANS SPEND
MORE ON GARDENING
THAN ANY OTHER
CITY IN CANADA



CALGARY SPENDS
2X MORE ON SPORTS
& RECREATION THAN
THE NATIONAL AVERAGE

INSPIRED BY THE WORLD

A critical element of Playbook 2030 research was auditing active economy related plans from across Canada and the world. The project team reviewed 70 domestic and global plans related to the 24 policy areas identified. Using these plans as a baseline, we identified a series of best practice case studies across four areas³²².

Shared Vision

1. Lahti: Herding Cats
2. Bristol: Working Together
3. New York: Get into Schools
4. New York: Plan it and They Will Come
5. Italy: A National Plan

Living Active Lives

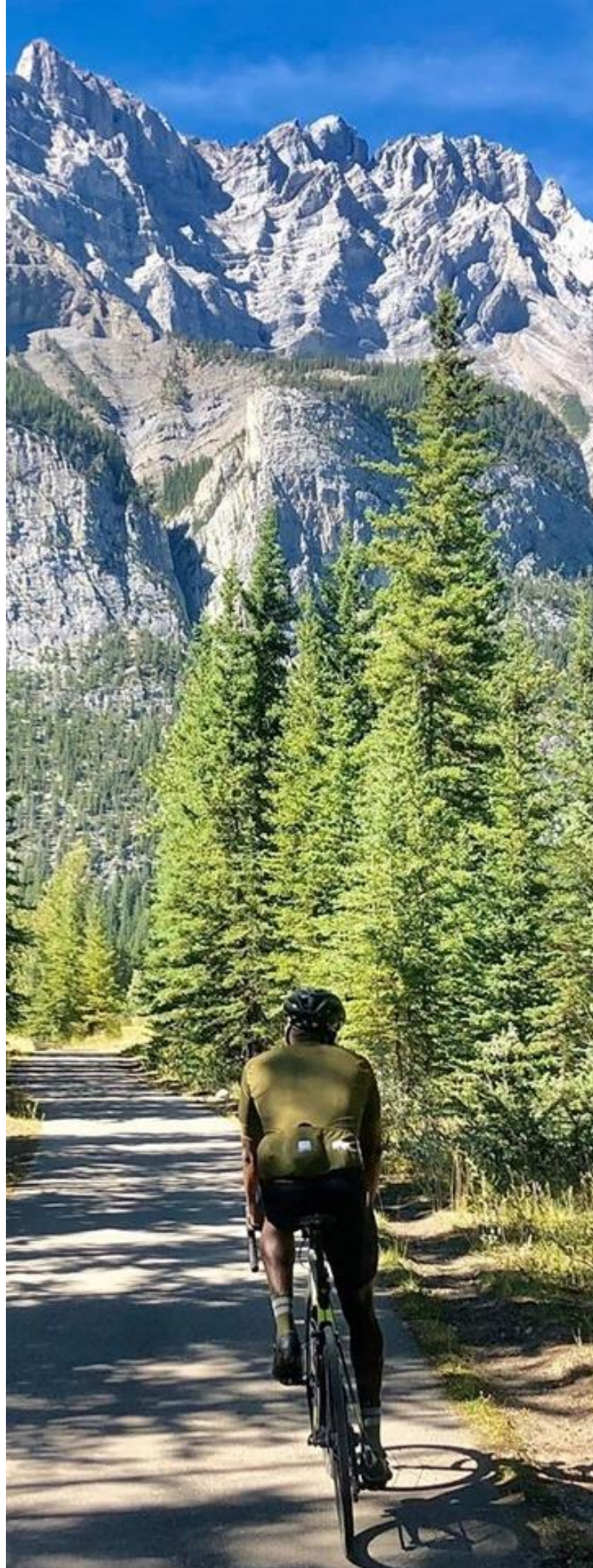
1. Oklahoma City: Getting a City Active
2. Montreal: Snow Excuse
3. Stockholm: Safety First
4. Buenos Aires: Overcoming Congestion
5. Zurich: Active City
6. East Harlem: People First

Build Community

1. Burlington: Nothing Happens Without a Plan
2. Copenhagen: People-Driven
3. Jharkhand: Getting Women Engaged in Sport
4. United Kingdom: Reimagining Ageing

Innovate & Grow

1. Boston: Technology-Enabled
2. ActiveLab: Technology is Key to Success



Lahti: Herding Cats

Finland's city of Lahti aims to "1-up" every active transportation program at once with the implementation of multiple master plans. Lahti has worked to develop everything from cycling and walking infrastructure to encouraging sustainable transportation methods, using the combined efforts of its City Strategy, Master Plan, Walking and Cycling Development Plan, and a Health Exercise Plan. Every plan shares an underlying value for city planning and sustainable transport; however the city also works directly with its citizens to identify new goals and construct new policies based on public opinion. Perhaps no better example of this in action was the "Dream Playground" project, which worked with children aged 7-10 to attain direction and feedback from the city's youth. With an upcoming implementation of a bicycle boulevard network among many other initiatives, the city is marching firmly towards its goal of running on active transportation.

Local Lessons

Calgary can learn from Lahti the importance of incorporating a **diverse range** of city departments in the planning and implementation of plans that impact the active economy. Through this approach, the city can ensure that the various planning across each department serves the active economy with a **coordinated approach**.





Bristol: Working Together

There are few places more accommodating to daily physical activity than Bristol, which dedicates a third of its city to easy-access outdoor recreation, be it park or pathway. According to their own Transport Strategy, the city has invested approximately £800,000,000 into transport infrastructure to 2020. This funding specifically focuses on providing lower-income communities with both greater access to, and less risk of injury from, all forms of transportation. To properly make use of its vast active transportation network, Bristol has done everything from promotional partnerships with groups like British Cycling, to founding a bike route planning website called Better by Bike. In explanation of such great measures, the City has cited the notable impacts on health that active transportation can have. These impact go beyond those who use it for exercise, but for all citizens, thanks to the resultant decrease in exposure to transportation-based pollution that plagues most massive metropolises. Bristol's leaders say these endeavors are just the beginning. Even when a car is your only option, they say it shouldn't have to impact your health. Due to the environmental nature, Bristol aims to invest in greener cars when considering transportation options in the future.

Local Lessons

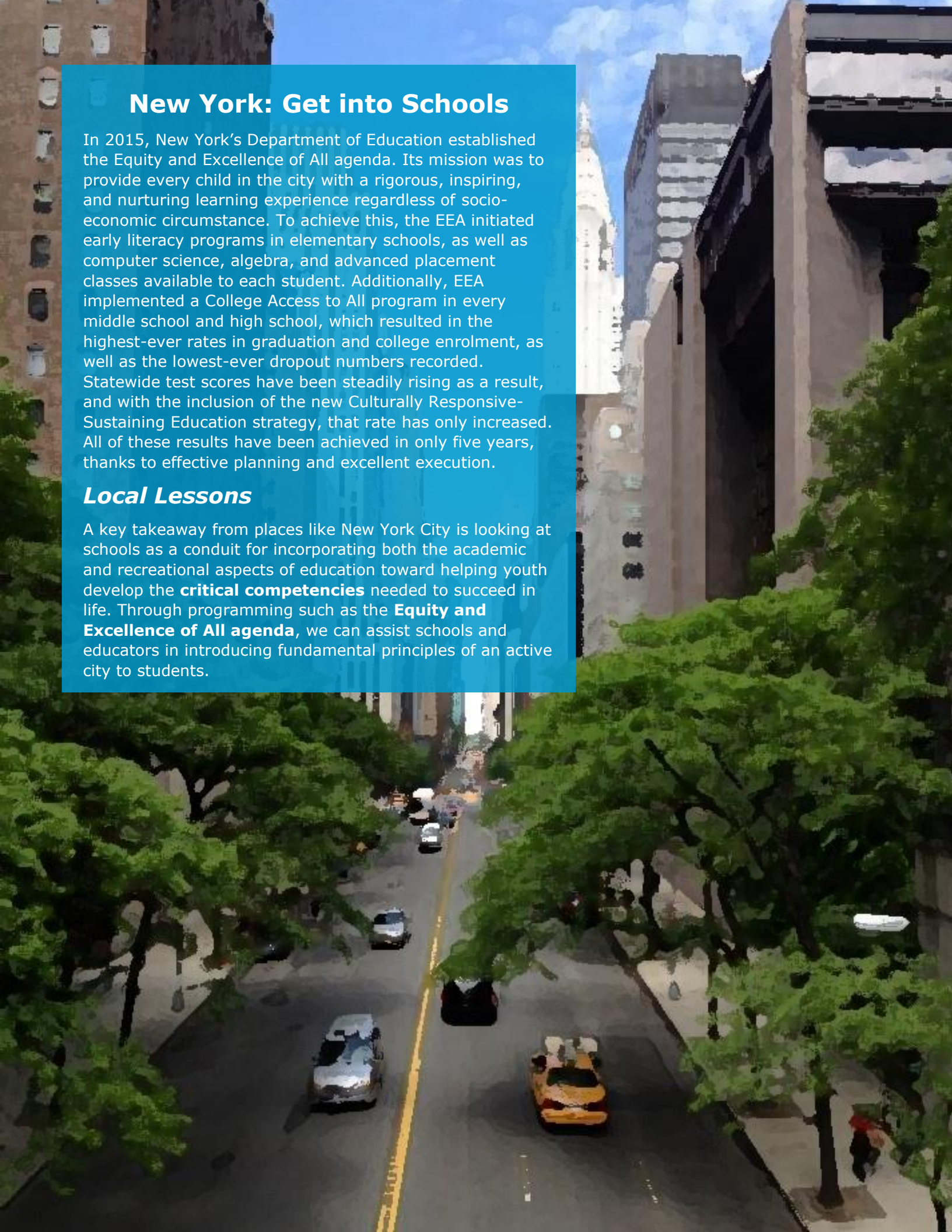
As an active city, Calgary must work **collaboratively** with organizations in order to improve accessibility and encourage more people to cycle. Due to an already vast **pathway network** and over 2,700 **parks** and **greenspaces**, the city should leverage partnerships to provide a key avenue for encouraging more citizens to cycle.

New York: Get into Schools

In 2015, New York's Department of Education established the Equity and Excellence of All agenda. Its mission was to provide every child in the city with a rigorous, inspiring, and nurturing learning experience regardless of socio-economic circumstance. To achieve this, the EEA initiated early literacy programs in elementary schools, as well as computer science, algebra, and advanced placement classes available to each student. Additionally, EEA implemented a College Access to All program in every middle school and high school, which resulted in the highest-ever rates in graduation and college enrolment, as well as the lowest-ever dropout numbers recorded. Statewide test scores have been steadily rising as a result, and with the inclusion of the new Culturally Responsive-Sustaining Education strategy, that rate has only increased. All of these results have been achieved in only five years, thanks to effective planning and excellent execution.

Local Lessons

A key takeaway from places like New York City is looking at schools as a conduit for incorporating both the academic and recreational aspects of education toward helping youth develop the **critical competencies** needed to succeed in life. Through programming such as the **Equity and Excellence of All agenda**, we can assist schools and educators in introducing fundamental principles of an active city to students.





New York: Plan it and They Will Come

With an estimated population growth of nearly one million more people by 2030, it was unclear if New York City's infrastructure could remain unburdened by the influx. To counter this conundrum, Mayor Michael Bloomberg launched PlaNYC, a long-term initiative to not only counter the population crisis, but also to address issues like climate change and to increase the quality of life amongst the general populace. Goals were set to encourage alternative forms of transportation, from cycling to public transit, as well as the construction of 10-minute-away parks and playgrounds that were accessible to each citizen. Three years into the plan, 12 city departments pitched in to develop the Active Design Guidelines, ensuring that all future projects would continue to keep physical activity in mind. Next came the Mayoral Obesity Task Force, targeting the childhood obesity epidemic by encouraging physical activity and healthier eating choices. When Mayor Bloomberg stepped down in favour of Mayor Bill de Blasio, PlaNYC was built upon further. Focusing additional resources on cycling, Mayor de Blasio's administration annually gave New York 50 miles of new bike lanes, while doubling the number of bikes at sharing stations and expanding the sharing system to low-income and underrepresented communities.

Local Lessons

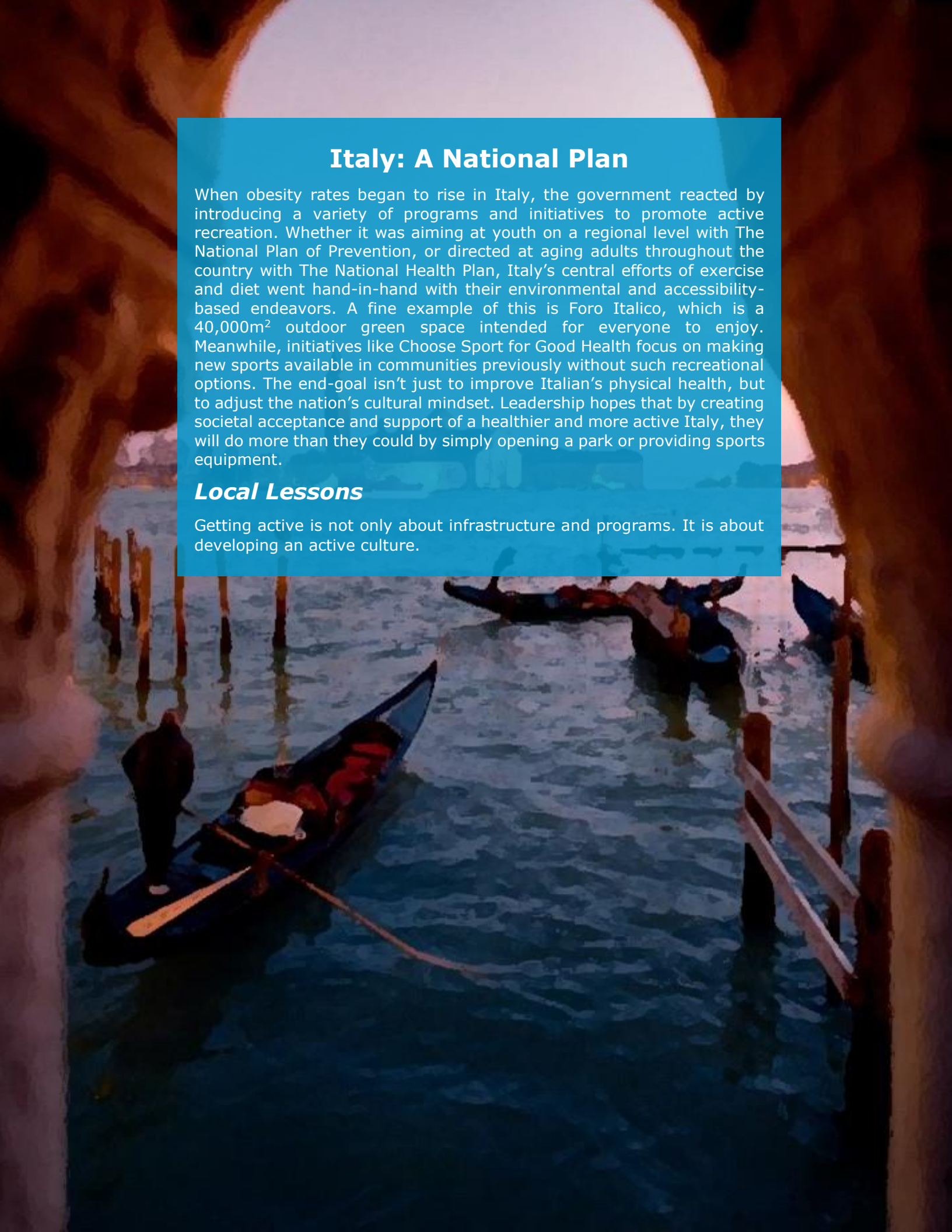
Initiatives such as PlaNYC are great ways Calgary can learn the importance of **long-term planning** in becoming an active city. Ensuring plans meet the needs of a **diverse range** of Calgarians is pivotal in the success of the *ActiveCITY* Playbook. **Intentional collaboration** between city departments and placing significant value on **public opinion** allows for the city to maintain a clear path in reaching goals set by the playbook.

Italy: A National Plan

When obesity rates began to rise in Italy, the government reacted by introducing a variety of programs and initiatives to promote active recreation. Whether it was aiming at youth on a regional level with The National Plan of Prevention, or directed at aging adults throughout the country with The National Health Plan, Italy's central efforts of exercise and diet went hand-in-hand with their environmental and accessibility-based endeavors. A fine example of this is Foro Italico, which is a 40,000m² outdoor green space intended for everyone to enjoy. Meanwhile, initiatives like Choose Sport for Good Health focus on making new sports available in communities previously without such recreational options. The end-goal isn't just to improve Italian's physical health, but to adjust the nation's cultural mindset. Leadership hopes that by creating societal acceptance and support of a healthier and more active Italy, they will do more than they could by simply opening a park or providing sports equipment.

Local Lessons

Getting active is not only about infrastructure and programs. It is about developing an active culture.





Oklahoma City: Getting a City Active

In 2007, the then-obese Oklahoma City Mayor Mick Cornett announced a personal and public initiative to encourage a healthier lifestyle for every Oklahoma Cityan, including himself. The challenge was one he would spearhead personally, and it was for the city as a collective to lose one million pounds. The initiative started with the launch of thiscityisgoingonadiet.com, which provided users with the information and tools necessary to monitor the city's collective progress. The public was quick to adopt the project, leading to an approved one cent sales tax to fund hundreds of miles of sidewalks, trails, and health centres, culminating in a 70-acre urban park. With additional support by private businesses, walking areas, bike lanes, and recreational facilities were added to that list. Although the goal was reached in 2012, the initiative's momentum showed no sign of slowing; after 10 years the project has raised a total of \$777 million that has gone towards active infrastructure. Mayor Cornett attributes these successes to a shift in the community's culture, resulting in a shared value of healthy living.

Local Lessons

Providing the city with clear and common goals with regards to becoming an active city allows for a united front moving forward. A strategy to **engage citizens** provides them with motivation to go out and improve themselves and the city they live in. Calgary must set **purposeful** and **competitive targets** for all citizens to buy into and collectively move towards.

Montreal: Snow Excuse

Montreal has been consistently crowned king of North America's cycling cities, and with their astonishing 750 km of bike paths and cycle tracks it is not hard to see why. In order to help its citizens utilize such a spectacular sprawl of cycling infrastructure, Montreal shares a partnership with the social bike-sharing organization Bixi, who provides over 6,000 bikes to be accessed with ease and returned to one of their 610 stations around the city. Even during the snowfall of winter, some 140 km of the network is actively maintained and cleared to allow continued safe use. Safety is both a priority and source of pride for Montreal. Even over the last two decades as cyclists grew ever-more frequent, the city has achieved a 68 per cent decrease in injuries. These efforts have come with significant benefits for the northern metropolis; from greatly increased tourism and migration, to preventing an estimated 250,000 tonnes of greenhouse gases between May and September alone. This increase in cycling infrastructure has led to a massive decrease in automobile accidents, saving an estimated 139 lives each year, which translates to an economic value of about \$940,000,000.

Local Lessons

Calgary can learn from Montreal in planning how to **accommodate cyclists** 12 months per year. As an active city, we need to be able to **adapt** to the six months of winter Calgary gets per year in order to provide and assist citizens who choose to cycle all year-round.





Stockholm: Safety First

Thanks to Sweden's Vision Zero policy, the country currently enjoys one of the lowest road accident fatality rates in the world. A project based on shifting perspectives for the better, Vision Zero directs blame for cycling injuries and deaths not towards any individual, but towards the planning of transportation infrastructure itself. Be it a result of human error or alcohol, the policy states that all accidents are avoidable, if proper planning is involved. By reducing difficult angles and potential collision points while managing traffic flow and speed, Vision Zero adjusts, updates, and adds to pre-established design, infrastructure, and technology for the betterment of everyone on the road. Sweden has turned quite a few international heads in the five years since implementation, as is to be expected when the result has been an almost 50 per cent decrease in all road fatalities.

Local Lessons

Calgary can learn from Stockholm with regards to how they were able to innovate and create a **feedback mechanism** that **communicates** with the users in **real time**. Providing cyclists and users of active transportation the opportunity to communicate directly to the planning process results in **key priorities** being addressed on what can be done better.

Buenos Aires: Overcoming Congestion

For many years, the car-reliant city of Buenos Aires suffered massive traffic congestion and dangerous environmental impacts thanks to the three million people living within its relatively small metro area. It didn't help that increasingly outdated infrastructure had resulted in 60 per cent of the population reporting the city's inability to meet their specific transportation needs. The Secretary of Transportation determined the best way to fix this was to implement alternative methods of locomotion beyond a car. After one million unused bikes were discovered in the Argentinian capital as the result of poor riding and safety issues, the city's leaders developed a four-year plan to establish "pedestrian and cyclist priority" on 90 per cent of central district streets. Since taking these measures at a city level, Buenos Aires has reduced its vehicle traffic by a whopping 80 per cent.

Local Lessons

Increased usage of **active transportation** results in a reduced number of cars commuting on the streets, and also has long-term positive **environmental implications** such as improved air quality from lowered vehicle exhausts. Establishing programs and plans that promote active transportation are a **win-win** in the sense that it could result in less cars on Calgary's streets.





Zurich: Active City

To many in Europe, Zurich is considered a hub of active transport. With 35 per cent of its citizens primarily walking to their destinations, it is understandable why hiking and cycling are the majority-chosen activity of leisure within the city. Their city's 340 km network of cycling tracks and lanes is impressive, and will only grow more-so over time, as Zurich continues to enact its 5-year plan to make the entire city traversable by bike. Indeed, the only more popular means of transport is through public means, primarily train, which 37 per cent of the population reports a reliance on. For this reason, Zurich has also introduced the fantastically named Durchmesserlinie project, which aims to add 9.6 more kilometers to the existing railway network, connecting the three remaining areas of the city currently without access. With almost 3,000 trains operating through Zurich Hauptbahnhof, the city's shrinking percentage of motor vehicle users is proving to be beneficial towards citizen's health and environment alike.

Local Lessons

Calgary is not Zurich and 35 per cent of our population will not walk to work. However, **mixed-use** and **active transportation** planning can start to shift the challenge of building a city for cars.

East Harlem: People First

Known for its excellent diversity, when New York's East Harlem began to notice low activity rates in its youth, the neighbourhood banded together under the banner of creative planning and programming for youth play. Now, they're leading the charge armed with collaboration and creativity for the benefit of all. It wasn't long before the government funded a project to dedicate 44.4 per cent of East Harlem's land area to public parks and open spaces. This has led to 11 currently ongoing capital improvement projects throughout 38 parks and playgrounds, which doesn't even touch on community-organized projects that encourage active transport and constructs community gardens. For an example of the impact of these creative programs can have, look no further than Concrete Safari, which has encouraged active play for 2,700 kids and counting. Finally, there is the Play Streets Initiative, the gleaming spearhead of East Harlem's efforts to improve active accessibility. Through collaboration with a combination of public entities and organizations throughout the borough, Play Streets closes off some streets in the area for seven weeks to provide various recreational opportunities for youth aged 6 to 18. A feat accomplishable only through intensive organization and creative planning.

Local Lessons

Like East Harlem, Calgary has an abundance of **parks** and **green spaces**. Calgary can learn from East Harlem's unique innovation and planning like Concrete Safaris and Play Streets to encourage use of **already existing infrastructure** in the city.



Burlington: Nothing Happens Without A Plan

In response to an increasing senior population within Burlington, the city has launched its Active Aging Plan to help its oldest citizens continue to remain physically active and communally engaged. This plan includes collaborating with 87 community service providers to help support the concept of an Age Friendly Community, as well as providing more affordable, convenient, and safe means of transportation for the aging demographic historically challenged in these areas. In the past, it was common for seniors deemed unable to drive due to old age, to find themselves cut off from friends, family, and society at large. Burlington hopes to counter this both through partnerships –such as with the Burlington Cycling Committee— and through the construction and support of accessible recreational locations and programs. Through community initiatives such as Love My Hood, the Neighbourhood Matching Fund, and the Neighbourhood Rinks program, and the implementation of community gardens, Burlington aims to both include and engage its most experienced residents. Preventing seniors from being cut off from society is key in Burlington’s Active Aging Plan, as it provides them with social opportunities through recreation that would not exist without it.

Local Lessons

Like many Canadian cities, Calgary must consider its aging population in order to keep **seniors engaged** in the active economy. An active city can learn from Burlington the importance of addressing this shift and providing opportunities that engage seniors through **intentional planning**. Diverse recreational programming and planning for the aging population in Canada results in increased health benefits and giving retired individuals the opportunity to pick up activities and interests with their increased spare time.



Copenhagen: People-Driven

While other cities may boast large active transportation networks, few can say such infrastructure is as extensively utilized as that found in Copenhagen, where 41 per cent of its two million residents choose to cycle to work. Over a four-year cycle, Copenhagen has tackled active living with extreme zeal, doing everything from building a one km long park through its most diverse neighbourhood that it lined with biking and jogging paths, to constructing an 18 km Cycle Superhighway interconnected by a further 15 km of cycle tracks, lanes, and Green Routes. Although this new infrastructure is impressive, it isn't Copenhagen's first efforts to improve their 97 per cent satisfaction rate towards a collective identity as a cycling city. They've invested a total of two billion DKK in cycling infrastructure since 2004 and have seen approval ratings for such endeavors steadily increasing by about three per cent to eight per cent a year since 2006, hitting 87 per cent as of 2016.

Local Lessons

Copenhagen utilized feedback from its citizens to develop a world-leading **cycling network**. Calgary should look to the people for their thoughts and opinions on how to improve the active transportation network in the city. **Feedback** and **approval ratings** provide the opportunity to see how Calgary is doing on a regular basis and allow the ability to divert attention and focus efforts accordingly.



Jharkhand: Getting Women Engaged in Sport

Jharkhand's Yuwa program presents a prime example of the importance of involving girls in sports. In a region infamous for child trafficking, Yuwa works in the greatest at-risk areas to build confidence, provide skills, and create hope for over 300 impoverished girls each day through team sports, such as soccer. In addition, YUWA ensures 90 per cent of its coaches are young women, thus providing healthy role-models of female leadership for the children, while also providing the coaches with an opportunity to develop leadership, teaching, and team-management skills. As the success of these programs have mounted, so too has the scope of YUWA's ambition. The organization has now constructed a school to help its members in both development of identity, and the pursuit of secondary education. What started as simply a way to offer sport to those at risk, has since expanded into an educational institution, enrolling 90 students and counting, as it expands further into rural and impoverished areas. A clear correlation has since been made between YUWA's endeavors and the rise in confidence of female voices within the region, culminating in bold and creative projects to enact beneficial societal change. This includes a recent group-effort of local YUWA participants to get their small, rural city on the map by building it a Wikipedia page. Not only was this venture ingenious, it presents a powerful example for the impact of providing young women with both technology and expanded worldviews.

Local Lessons

Promoting **active lifestyles** to uplift and provide opportunities to those of less fortunate communities can create **meaningful** and **measurable impacts**. A strategy to engage citizens provides them with motivation to go out and improve both themselves and the city they live in. Calgary needs to develop **interesting goals** for its citizens to **pursue and evaluate**.



United Kingdom: Reimagining Ageing

There has been a major demographic shift happening throughout many major UK cities, as the number of residents over the age of 60 has increased by nearly a third. With an elderly population of now over 20 million, it has become clear that health and recreation can no longer favour the young. ukactive stepped up to tackle this task with innovative gusto, presenting initiatives for activity in the workplace, active therapy, and volunteerism, all of which emphasize the importance of physical activity for those of advanced age. This £98,000,000 movement has been built upon the premise of "healthy ageing," and in the spirit of this mantra ukactive is taking steps to make sure their many programs age effectively. By partnering with technology company Refer All, they are continuously collecting data from participants in exercise referral programming, with the intent of continually improving each initiative until it is as effective as possible. Early adoptions of these efforts have shown promise, and ukactive has pledged to use collaborations such as the one discussed with Refer All to overcome the barriers associated with catering active recreation to seniors.

Local Lessons

Calgary is also facing the task of addressing its increasing **senior population** and can learn from the initiatives ukactive have implemented and also work to collaborate some of their own unique, **community-oriented solutions**.

A man with a beard, wearing a light blue shirt, is sitting at a table in a cafe, working on a laptop. He is looking at the screen. In the background, there are other people, including a woman with long dark hair, and a window with a view of a street. The cafe has warm lighting with orange pendant lights.

Boston: Technology-Enabled

Boston has historically made active transportation and pedestrian walkability one of their top priorities, creating a continuously improving active transportation network. Boston's Complete Streets initiative is a pedestrian-prioritizing project that has been running strong since 2009. Originally created by 14 city agencies to focus on designing roadways capable of supporting multiple means of transportation simultaneously, while also providing greener travel solutions to boot, Complete Streets was an ambitious endeavour. It aimed to accomplish a series of goals through the use of "smart" designs and technology, such as the implementation of electric vehicle sharing, and the inclusion of wayfinding/social networking tools to those in transit. To accomplish a secondary goal of street safety, the initiative next focused on additional lighting sources and crossing areas, as well as extending crossing time in problem areas. To help keep the public up-to-date and supportive of the initiative's many updates and future plans, Boston put together a website full of easy-to-understand graphics navigated with an intuitive interface. While still ongoing, the techniques of the Complete Streets initiative have been noted and implemented by at least 20 other city construction projects.

Local Lessons

A big takeaway from this case study is that there is not just one solution to improving the active transportation opportunities in Calgary. Through proper planning and advancements such as **technological innovation**, the city can develop various plans and actions that contribute to a wide array of interests. There are many aspects in an **active transportation network** that can be improved upon, such as **connectivity**, **safety**, and **accessibility**.

ActiveLab: Technology is key to Success

Technology is constantly changing and improving our day-to-day lives, and its impact on the active economy is no exception. Fit-Tech is a new development that aims to change the game of games by assisting exercise using technology. From ukactive's Active Lab program that works to develop new fit-tech solutions for long-running exercise problems, to spin and HIIT studios like Dogme incorporating Fit-Tech into it's facilities, it's clear that the UK has placed an emphasis on improving fitness through software and hardware alike. This has culminated in a system of open collaboration and shared development between Sport's Sport Tech Hub, the Open Data Institute's Open Active programme and ukactive's ActiveLab, to form a "Start-Up Superhighway." Through efforts such as these, that provide open data for organizations like Dogme to incorporate and explore Fit-Tech, the UK is turning their active economy into a super-powered cyborg.

Local Lessons

Calgary can learn from ukactive and ActiveLab's early adoption of **FitTech** and can look to work with local active economy leaders to foster new **technological innovation** unique to the region.

INSPIRED IN YYC

Calgary has a vast and rich active economy composed of 4,000 commercial, social and public enterprises. Over 90 per cent of these organizations are small and medium-sized enterprises with less than ten employees. Many of these enterprises are agile, and over decades have innovated to meet evolving market dynamics and needs³²³.

Shared Vision

1. Adapted Hub: Sport for All in Calgary
2. Shaw Charity Classic: Leadership

Living Active Lives

1. Copperfield School: Active School Travel Project

Build Community

1. Kidsport Calgary: All in.
2. Indigenous Sport: Path to Reconciliation
3. YYC Kids Ride: Inclusive Fun

Innovate & Grow

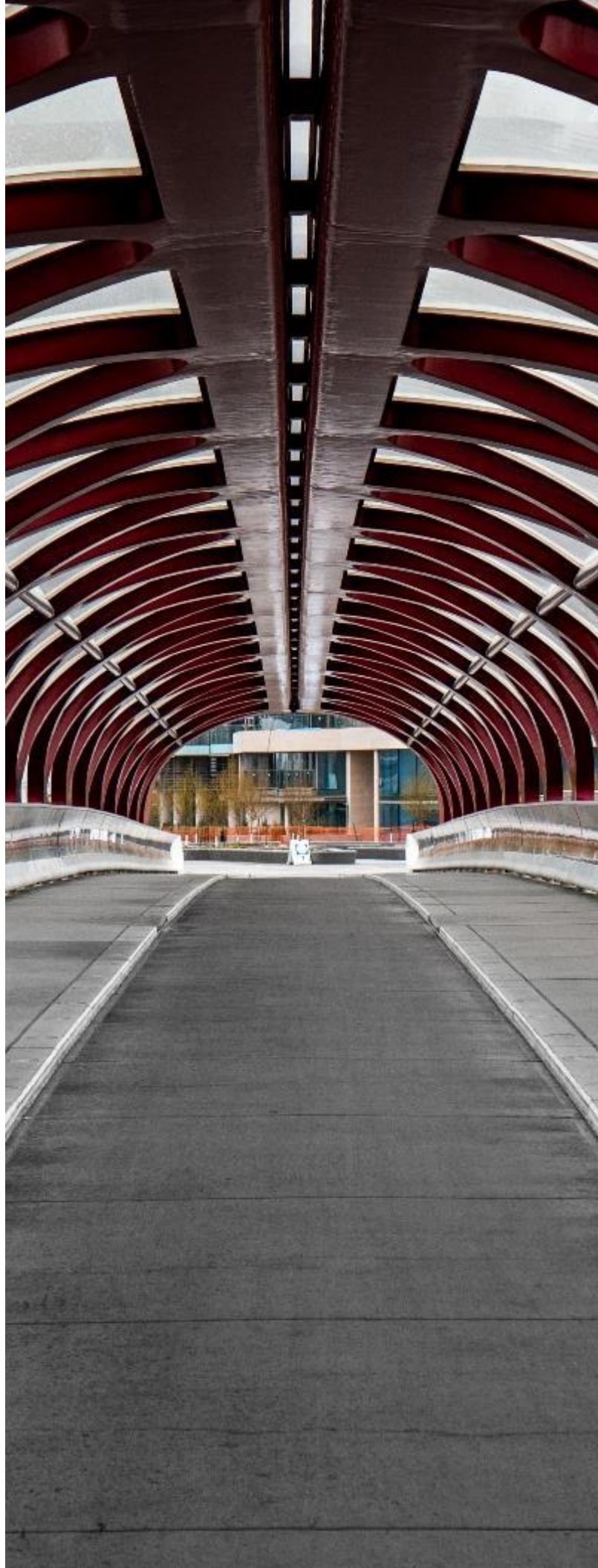
1. Intuitive Engineering: Think Different
2. Glenbrook Multisport Community Centre
3. PlayCity: Build Community with Tech

Drive Sustainability

1. AdrianMartinus Design: From Skateboards to Art

Inspire Others

1. Garmin: World Leader in Wearables
2. Resorts of the Canadian Rockies
3. Canadian Tire Jump Start



Adapted Hub: Sport for All in Calgary

Although many organizations aim to improve accessibility to sports, they can often forget the need for inclusivity in sports as well. Calgary Adaptive Hub focuses on this problem head-on by working to adapt sports and recreation for children and youth with disabilities. An impressive collaboration between Mount Royal University, Repsol Sport Centre, WinSport, Vivo, University of Calgary, the City of Calgary and Sport Calgary, the Adaptive Hub works to collectively develop, research and build on inclusive recreational programming. The result? A positive impact previously impossible when working alone. The efforts of these seven leaders in the active economy demonstrates just how effective working together towards a common goal can be, and how much this program means to youth and children with disabilities in their social and athletic development.

Local Lessons

The **Calgary Adaptive Hub** model represents untapped potential that Calgary has to offer in terms of leveraging **community partnerships** for **effective programming**.

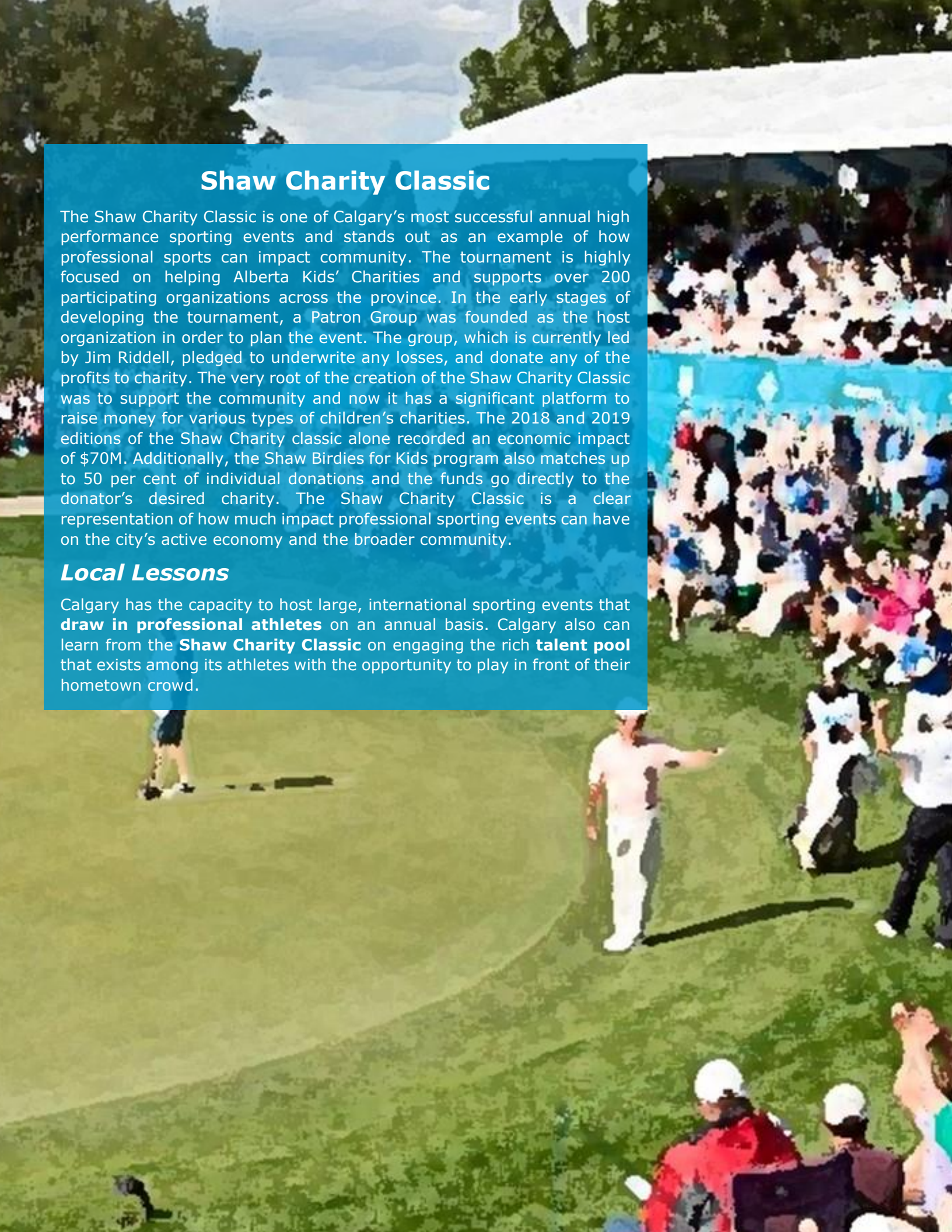


Shaw Charity Classic

The Shaw Charity Classic is one of Calgary's most successful annual high performance sporting events and stands out as an example of how professional sports can impact community. The tournament is highly focused on helping Alberta Kids' Charities and supports over 200 participating organizations across the province. In the early stages of developing the tournament, a Patron Group was founded as the host organization in order to plan the event. The group, which is currently led by Jim Riddell, pledged to underwrite any losses, and donate any of the profits to charity. The very root of the creation of the Shaw Charity Classic was to support the community and now it has a significant platform to raise money for various types of children's charities. The 2018 and 2019 editions of the Shaw Charity classic alone recorded an economic impact of \$70M. Additionally, the Shaw Birdies for Kids program also matches up to 50 per cent of individual donations and the funds go directly to the donator's desired charity. The Shaw Charity Classic is a clear representation of how much impact professional sporting events can have on the city's active economy and the broader community.

Local Lessons

Calgary has the capacity to host large, international sporting events that **draw in professional athletes** on an annual basis. Calgary also can learn from the **Shaw Charity Classic** on engaging the rich **talent pool** that exists among its athletes with the opportunity to play in front of their hometown crowd.





Copperfield School: Travel Project

For the past three years, Southeast Calgary's Copperfield School has used its Active School Travel (AST) project to encourage active and safe community travel. As a member of the provincial Ever Active Schools initiative, Copperfield created this program to achieve their collaborative goal of a healthy school community. Administrators and a team of parent champions are now working hard to influence a more active student environment through hosting active school travel event days, working with the City of Calgary to add and upgrade crosswalks, add bench buddies and scooter racks, and increase the number of bike racks available to students. The result? 49 per cent of Copperfield's students now walk or wheel to school, with the percentage expected to reach 55 per cent in two years' time. The AST team continues to meet monthly to further improve their students' active travel experiences, and this leadership has not gone unnoticed. Neighbouring schools have followed suit with their own active school travel projects, their collective paths lit by the light of Copperfield's progress.

Local Lessons

Copperfield School is a prime example of the potential our schools hold to **foster innovative solutions** to involve youth in **active living**. Other organizations and schools in Calgary can learn from Copperfield School's success to develop their own unique, **community-based solutions**.



KidSport Calgary: All In

Collaborating with community organizations is important if you wish to strengthen the active economy, and there are few finer examples of this in action than with Kidsport. Aimed at providing sports opportunities to youth, Kidsport has worked tirelessly for the past five years to create partnerships and programming to help support over 24,000 kids in their region. The charity works with local organizations and sports clubs like Flames Sports Bank and Recycle for Life to raise funds for Calgary's active economy. Thanks to their countless collaborations, Kidsport has successfully spread \$7.55 million throughout Calgary's active community. Although achieving this goal is impressive, what is arguably more noteworthy is how Kidsport achieved goals that weren't part of the initial project. When collaborating with Flames Sports Bank, they began accepting donations of lightly used sports equipment, which Kidsport was able to then redistribute to those without the tools to play. Still, the organization continues to grow, sighting a desire to make sport as accessible as possible throughout the entirety of the region.

Local Lessons

Kidsport is setting the standard on how to develop **innovative community partnerships**. Working with **professional sports organizations** like the **Calgary Flames** provides unique initiatives that benefit both the organization and **youth in sport**.



Indigenous Sport: Path to Reconciliation

Spanning five provinces and one territory, Spirit North is an expansive charity organization that brings sport and recreation to Indigenous youth. Their tireless efforts have proven highly invaluable in improving social development and paving the path towards societal reconciliation. Last year alone, Spirit North engaged over 6,300 youth across over 60 communities in various forms of recreation, sport, and active programming. The secret to their success? Collaboration with schools. By following a method of co-creation, Spirit North uses these community hubs to give each community its own voice, allowing the organization to tailor the programs they present to what people actually want. Now working with 77 schools containing 787 staff members, Spirit North has become a leader in the effort to engage Indigenous youth throughout Canada. Although the path to reconciliation remains trying at times, Spirit North has proven a model of working together to support indigenous communities through the power of sport and recreation.

Local Lessons

The city can learn from the **programming** done by Spirit North and consider working collaboratively with the organization to continue to provide **sport programming to Indigenous youth** in the surrounding region's various Indigenous communities.



YYC Kids Ride: Bootstrapping Innovation

Calgary's Forest Lawn community is home to Gar Gar, a grassroots advocate for youth and community prosperity. When COVID-19 began to impact the city right as the snow began to melt, Gar Gar decided to take action toward getting youth involved in physical activity by creating an initiative called YYC Kids Ride. The goal of the group was to take in donated bikes from community members whose kids had outgrown their old bikes or just wanted to help out and provide to those who may not have a bike. The result of the YYC Kids Ride initiative was 190 bikes given out on July 1st and 280 bikes donated and ready to be given distributed August 8th. The result of the event is much more than a number total; providing youth with donated bikes gives the opportunity for these youth to improve their skills and experiences helping them grow as individuals. The YYC Kids Ride initiative demonstrates how powerful Calgary's communities can be when supporting each other and working together to achieve a common goal.

Local Lessons

Social innovation is not always about requiring a large budget. Sometimes the most **impactful innovations** can be bootstrapped with a few dollars and a **strong commitment to community**.

Entuitive Engineering Calgary

Although Calgary has hosted a vast array of international sporting events, some facilities face barriers to meet the requirements to accommodate large, high level events. In 2018, Tourism Calgary recognized that the Diving Grand Prix was an event that could be brought to Calgary to assist local diving athletes in their journey to becoming Olympians. However, because the most suitable venue, Repsol Sport Centre was built in 1983, the existing infrastructure for the diving tower did not meet required specifications. Tourism Calgary found an unintended consequence of engineers losing jobs in the energy sector by connecting with Entuitive Engineering and Ian Washbrook to find a solution to this problem.

Entuitive Engineering worked on a pro-bono basis and determined it would cost roughly \$50,000 to install a regulation-sized diving platform to allow the venue to accommodate the event. In yet another collaborative effort, the organizations then worked out a three-way partnership between Tourism Calgary, Diving Canada, and the Repsol Sports Centre where each would pay a third of the cost and recognize Entuitive. The economic and sectoral impact of this effort yielded \$2.9M from the 2018 and 2019 Diving Grand Prix events made possible with a \$50,000 investment.

Local Lessons

Calgary is a city that works together to create **innovative solutions**. The **collaborative environment** enables better problem-solving potential which may lead to benefits for the entire community.

A woman wearing a white t-shirt, dark shorts, and sunglasses is captured in motion on a blue tennis court. She is holding a tennis racket and a yellow tennis ball, appearing to be in the middle of a serve or a forehand stroke. The background shows a green fence and some trees under a clear sky.

Glenbrook Multisport Community Centre

Located in a quiet community of southwest Calgary, today's Glenbrook Community Centre is a multisport facility which caters to the recreational needs of diverse groups in the community. This was not always the case. As recent as 2015, the community space consisted of only a playground and outdoor rink, both of which sat empty for most of the year. The community noted this lack of utility, and so entered into discussions to upgrade the space with more active options. The result of these discussions was innovation. They took the vacant rink and transformed it into a multisport venue to be used during the warmer months, housing a mini soccer and ball hockey court, a volleyball and basketball court, and the home of Calgary Padel Association's two padel courts. The padel space itself has been additionally enhanced to play pickleball, mini tennis, and badminton.

The centre has since grown into a hub of multicultural activity, attracting individuals of widely varying ages, ethnicities, and classes. This was all made economically possible by preserving the existing park space, and the results speak for themselves. On any given day, the Glenbrook Community Centre plays host to 100 local residents, with the new capacity for year-round usage multiplying participation several times over. Canada is covered in barely touched hockey rinks just like this, and thanks to Glenbrook's innovation, the potential of these empty spaces is now being noticed.

Local Lessons

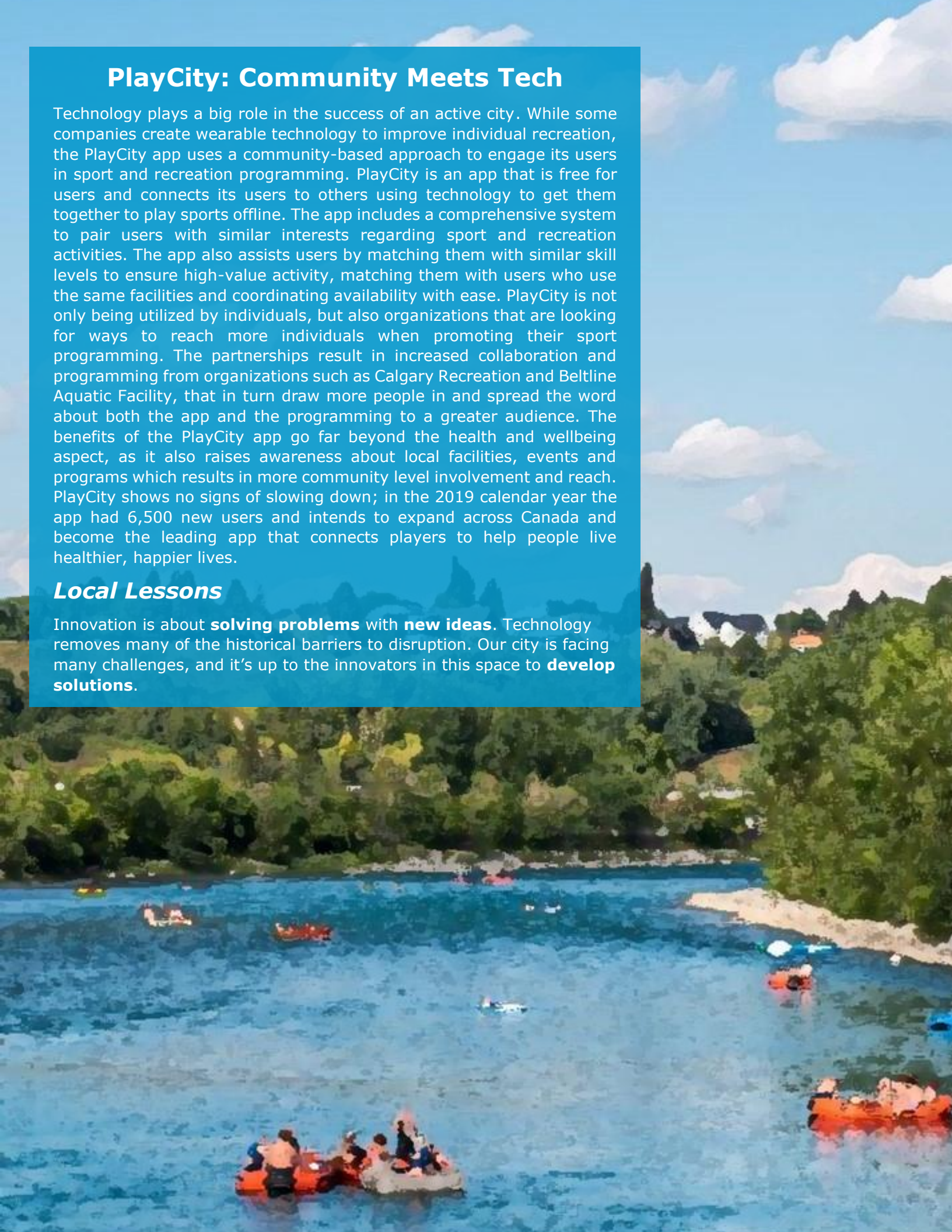
The Glenbrook Multisport Community Centre is an example of a community making better use of its facilities. By offering more **flexible activity options** throughout the year, communities more effectively engage their members in active pursuits.

PlayCity: Community Meets Tech

Technology plays a big role in the success of an active city. While some companies create wearable technology to improve individual recreation, the PlayCity app uses a community-based approach to engage its users in sport and recreation programming. PlayCity is an app that is free for users and connects its users to others using technology to get them together to play sports offline. The app includes a comprehensive system to pair users with similar interests regarding sport and recreation activities. The app also assists users by matching them with similar skill levels to ensure high-value activity, matching them with users who use the same facilities and coordinating availability with ease. PlayCity is not only being utilized by individuals, but also organizations that are looking for ways to reach more individuals when promoting their sport programming. The partnerships result in increased collaboration and programming from organizations such as Calgary Recreation and Beltline Aquatic Facility, that in turn draw more people in and spread the word about both the app and the programming to a greater audience. The benefits of the PlayCity app go far beyond the health and wellbeing aspect, as it also raises awareness about local facilities, events and programs which results in more community level involvement and reach. PlayCity shows no signs of slowing down; in the 2019 calendar year the app had 6,500 new users and intends to expand across Canada and become the leading app that connects players to help people live healthier, happier lives.

Local Lessons

Innovation is about **solving problems** with **new ideas**. Technology removes many of the historical barriers to disruption. Our city is facing many challenges, and it's up to the innovators in this space to **develop solutions**.





AdrianMartinus Design – From Skateboards to Art

AdrianMartinus Design is a fully-integrated design studio and creative workshop with a commitment to quality craftsmanship and the highest levels of customer service. AdrianMartinus Design was founded by brothers Adrian and Martinus Pool in 2012. As both passionate carpenters and skateboarders, they saw old skateboards as an opportunity. Working out of their parents' garage, they began turning old skateboards into art pieces and home décor. Today, AdrianMartinus is creating high quality products that challenge the boundaries of conventional woodworking practice – all while paying homage to their roots in the skateboarding community. This includes handcrafted, custom-built furniture, art and exclusive homeware. In November 2020, AdrianMartinus won the \$15,000 US grand prize at the second annual Etsy Design Awards for their upcycled skateboard credenza.

Local Lessons

The active economy is first and foremost an **innovation** economy. **Active living** can be a powerful source of inspiration for how to look at the world and opportunities differently.

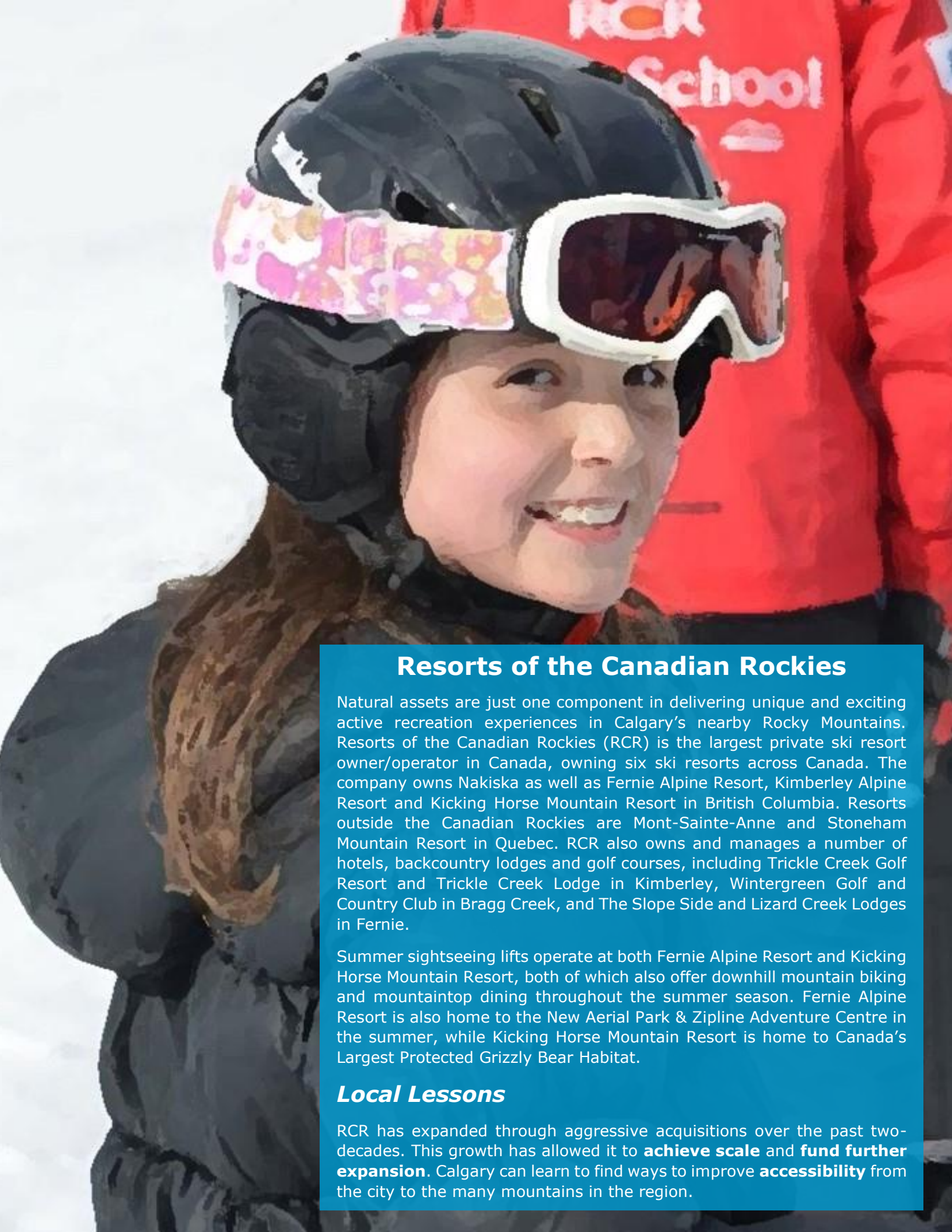


Garmin: World Leader in Wearables

The private sector has a vital role in the active economy. While many entities offer various active products that support an active lifestyle, Garmin Ltd. stands out as a company that is truly harnessing the potential of FitTech and competes with companies such as FitBit and Apple with their active life products. The products offered by the organization range from personal wearable technology to GPS technology for aviation. Garmin offers active life products that compete with industry leaders in terms of outdoor recreational GPS experience while also fostering a corporate identity of sustainability in how they create products. Additionally, Garmin offers more than just products to its users; the organization has a blog that covers eight different categories in relation to their products, from aviation to outdoor recreation. Garmin goes above and beyond when supporting the active lifestyle for its consumers; by providing insight from experts, podcasts and programming such as workout suggestions to allow readers to learn from an open database.

Local Lessons

Growth comes in many forms. Investing in the future of **FitTech** is just one of many ways Calgary can continue to grow as a **hub** for **new technology**.



Resorts of the Canadian Rockies

Natural assets are just one component in delivering unique and exciting active recreation experiences in Calgary's nearby Rocky Mountains. Resorts of the Canadian Rockies (RCR) is the largest private ski resort owner/operator in Canada, owning six ski resorts across Canada. The company owns Nakiska as well as Fernie Alpine Resort, Kimberley Alpine Resort and Kicking Horse Mountain Resort in British Columbia. Resorts outside the Canadian Rockies are Mont-Sainte-Anne and Stoneham Mountain Resort in Quebec. RCR also owns and manages a number of hotels, backcountry lodges and golf courses, including Trickle Creek Golf Resort and Trickle Creek Lodge in Kimberley, Wintergreen Golf and Country Club in Bragg Creek, and The Slope Side and Lizard Creek Lodges in Fernie.

Summer sightseeing lifts operate at both Fernie Alpine Resort and Kicking Horse Mountain Resort, both of which also offer downhill mountain biking and mountaintop dining throughout the summer season. Fernie Alpine Resort is also home to the New Aerial Park & Zipline Adventure Centre in the summer, while Kicking Horse Mountain Resort is home to Canada's Largest Protected Grizzly Bear Habitat.

Local Lessons

RCR has expanded through aggressive acquisitions over the past two-decades. This growth has allowed it to **achieve scale** and **fund further expansion**. Calgary can learn to find ways to improve **accessibility** from the city to the many mountains in the region.

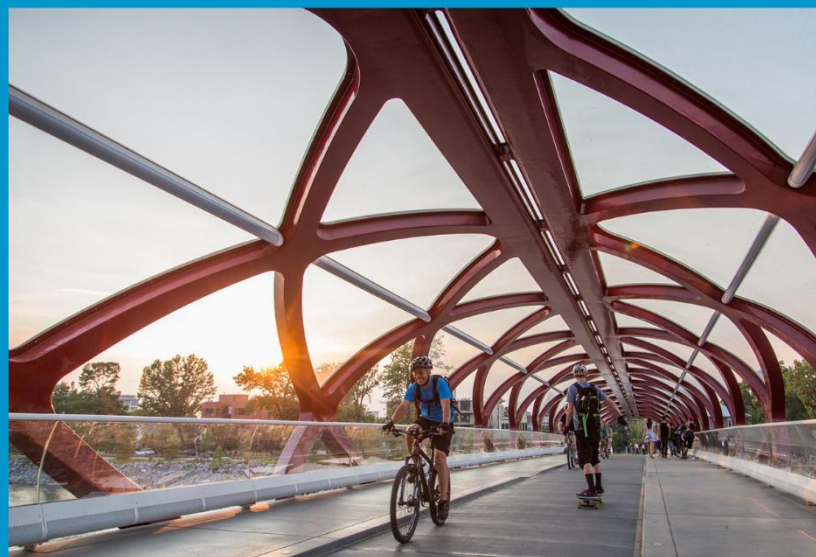
A photograph of an ice hockey rink. In the foreground, several players in red and blue jerseys are sitting on the ice. In the background, a player in a red jersey is standing. A banner on the rink wall reads "To be a champion you must be a champion" with a red heart symbol. The text "Canadian Tire Jump Start" is overlaid on a blue background in the top right corner.

Canadian Tire Jump Start

The importance of giving back to the community is something that is very important in many organizations' agendas. But not many Canadian corporations can match the standards of quality and charitable programming being put on by Canadian Tire toward sport and recreation. Canadian Tire has made it clear that it cares about the Canadian communities it serves. The organization demonstrates their commitment through initiatives such as Canadian Tire Jumpstart Charities, partnerships with sport organizations and providing programming in local communities. For Canadian Tire, charitable work that gets youth involved in sport and recreation is more than just social responsibility, it is an investment in future community prosperity. For example, the Jumpstart program identifies three key benefits to the youth they are able to engage in their programming; self-esteem, social skills, and academics, all of which are a result of getting youth active. Additionally, Jumpstart addresses issues that go beyond just getting youth active, including support of programs for girls and other forms of inclusivity.

Local Lessons

Being good to the community is good business. Take care of your community and your community will take care of you.



9

STRATEGIC FRAMEWORK

OUR VISION

Calgary is Canada's most livable region.

Our Mission

The Calgary regional active economy is recognized as a global leader through a sustained collaborative commitment to the region's economic, human, social and environmental prosperity.

THE INSIGHTS

The project team has distilled the analysis from the previous seven sections into ten insights that will guide the strategy of Calgary's regional active economy.



Insight 1: Community prosperity

The single goal of our regional active economy is to contribute to our community's economic, human, social and natural environment prosperity. This starts by putting people first.



Insight 2: A unique community asset

In 2020, 95 per cent of our community was engaged in one of the almost 4,000 enterprises in Calgary's regional active economy as participants, employees, volunteers or fans. No other sector reflects an equivalent reach. However, few of the 1.5 million people engaged in the active economy possess a shared purpose and identity as contributors to our active economy.



Insight 3: Diversity

Calgary is the third most ethnically diverse city in the country. Moreover, like other communities, we also have an aging population. The needs of diverse groups such as persons with disabilities, LGBTQI2S+ and First Nations are also being highlighted, but clearly much remains to be done before true equity and belonging is achieved. Calgary's regional active economy must adapt to deliver on the dynamic and evolving needs of our community.



Insight 4: Fragmented

Calgary's regional active economy incorporates almost 4,000 commercial, social, and public service enterprises across eleven sectors, three cities, six towns, four villages, two municipal districts, two First Nations, multiple school boards, two national parks and dozens of provincial parks and recreation areas. Within the

City of Calgary alone, 18 plans incorporating essential dimensions of the regional active economy were identified. This fragmentation contributes to a lack of shared vision, harmonized investment and advocacy strategy to maximize value.



Insight 5: Winners & losers

The sectors that compose the active economy are historically highly competitive. This leads to a zero-sum culture of capacity building, composed of winners and losers. This mindset limits capacity building and growth across the ecosystem.



Insight 6: Economic realities

The provincial and municipal economy continues to maintain a disproportionate dependence on a weakened energy sector facing structural disruption. This vulnerability will constrain both municipal and provincial resources and priority may therefore be given to programs and services that provide a measurable impact on the community. COVID-19 is amplifying this economic vulnerability.



Insight 7: Impact on physical and mental wellness

The physical activity output of Calgary's regional active economy contributes to a reduction of over two dozen physical and mental health conditions, extending life expectancy by 3.9 years. Improvements in physical and mental health contribute to significant economic, social, and environmental value.



Insight 8: Social prosperity

Calgary's regional active economy contributes measurably to community cohesion, social inclusion, civic identity, and active citizenship. For example, 111,000 people volunteer 14.8 million hours annually to Calgary's regional active economy, the largest of any sector.



Insight 9: Environmental prosperity

Evidence demonstrates that a well-designed regional active economy can have a measurable positive environmental impact in areas such as pollution and carbon emissions.



Insight 10: Economic prosperity

The 4,000 commercial, social and public enterprises in Calgary's regional active economy directly contributes \$3.3 billion annually to the Calgary GDP. In addition, Calgarians spend twice the national average on sport and recreation products and services. The growth of Calgary's regional active economy must focus on the opportunity to scale these enterprises regionally, nationally, and globally.

FROM INSIGHTS TO STRATEGIC PILLARS

To deliver our vision and mission, Calgary's regional active economy will be guided by six strategic pillars:



Pillar 1: Shared vision



Pillar 2: Live active lives



Pillar 3: Build community



Pillar 4: Innovate & grow

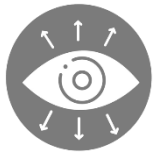


Pillar 5: Drive sustainability



Pillar 6: Inspire others





PILLAR 1: SHARED VISION

Calgary’s regional active economy is anchored in an integrated, actionable, and shared vision, fostering harmonization and shared learning. It is interconnected. In doing so, we recognize that sustainable community impact is larger than any single enterprise.

GOALS

1. By 2030 Calgary is recognized as a global leader for its sustained commitment to collaboration and harmonization.
2. By 2030, Calgary’s regional active economy is central to policy issues facing all levels of governments.

PRIORITIES

Develop a culture of collaboration

Identify simple opportunities for increasing collaboration and harmonization across the ecosystem. The goal is to identify “quick win” opportunities with obvious shared benefit. The recent launch of the Calgary Adaptive Hub among seven ecosystem partners is an example of building a culture of collaboration.

Facilitate ecosystem level harmonization through a permanent backbone organization.

The vision for this Playbook can only be achieved through sustained and systematic harmonization. To do so, Calgary’s regional active economy must establish a backbone organization mandated with facilitating ecosystem harmonization to deliver on Playbook 2030 outcomes. The scope of this organization will include, but not be limited to the following:

1. Develop and manage an implementation plan for Playbook 2030.
2. Develop and implement ongoing ecosystem level community engagement and advocacy.
3. Develop and implement an integrated capacity building strategy for the active economy including a focus on:
 - a. Financial capital
 - b. Human capital
 - c. Structural capital

4. Develop and implement ecosystem level knowledge sharing including:
 - a. Establishing a community scorecard and an annual regional active economy community impact report, including a diagnostic tool and support for active enterprises to measure and map their community impact.
 - b. Defining ecosystem community impact measures.
 - c. Aligning ecosystem level data collection.
 - d. Facilitating ecosystem level research.
5. Develop a 10-year collaborative active ecosystem capital plan:
 - a. Prioritize infrastructure to deliver on the 2030 vision.
 - b. Identify opportunities for ecosystem-level harmonization across commercial, social, and public entities.

What Change May Look Like

- Establishment of an *Active Calgary Foundation* to harmonize and invest in projects delivering on Playbook 2030.
- The reach and measurable impact of the active economy emerges as a central policy issue across all levels of government. Politicians and candidates respond with clear policy positions and commitment to investment.
- To develop ecosystem leadership; Mount Royal University and the University of Calgary launch a joint certificate in active economy management.



PILLAR 2: LIVE ACTIVE LIVES

Calgary’s regional active economy is committed to improving the physical and mental health and wellbeing of our community by enabling citizens to live active lives at home and work. We will do this by advocating for integrated planning that promotes open spaces, mixed-used communities, a four-season integrated active transportation network and wellbeing through active living.

GOALS

1. By 2030, the Calgary region leads Canada in all indicators of physical and mental health.
2. By 2030, the Calgary region leads Canada in active transportation adoption.
3. By 2030, the Calgary region leads Canada in indicators of physical activity and active living.
4. By 2030, the Calgary region leads Canada in the adoption of workplace wellbeing programs for small and medium-sized businesses.
5. By 2030, the Calgary region leads Canada in the integration of the school systems into a regional active plan.

PRIORITIES

Advocate for developing and deploy a comprehensive four-season active transportation plan

Advocate for developing and deploying a comprehensive four-season active transportation plan that delivers on the principles of the City of Calgary’s Municipal Development Plan and the Transportation Plan and achieves the goals of being Canada’s leading region for active transportation by 2030. The scope of this plan will include walking, cycling and integration with public transit. Areas for improvement include, but are not limited to wayfinding, cycle tracks, protected infrastructure, safe street crossing, bike parking, end-of-trip facilities and pedestrian infrastructure.

Advocate for school boards to adopt policies to promote active living

Active transport: Play an active role in advocating and supporting school board policies

that prioritize active transportation as the primary means of transport for students.

Diversify activities: Play an active role in advocating and supporting schools to introduce a diversity of activities to stimulate extended engagement outside the school system.

Advocate for investing in active urban planning principles

Play an active role in ensuring the priority active urban principles embedded in the municipal development and transportation plans associated with increasing density, mixed-use and active transportation are funded.

Advocate for an integrated regional transportation strategy

Play an active role in advocating for an integrated regional transportation system to enable efficient and sustainable access to natural and built active economy amenities.

Develop and deploy an ecosystem-wide workplace wellness strategy

Play an active role in advocating for the expansion of innovative high-impact workplace wellness programs to small and medium-sized enterprises.

What Change May Look Like

- The Active Calgary Foundation’s small business wellness initiative contributes to a 40 per cent reduction in absenteeism, leading to an estimated 12 times return on investment by small business owners.
- The Active Calgary Foundation and EverActive Schools launch Canada’s first integrated esports physical activity program. This program expands to all junior high and high schools in the city by year three.
- With a harmonized expansion strategy that integrates the existing recreation pathway system, Calgary becomes the leading active transportation system per capita in Canada.



PILLAR 3: *BUILDS* COMMUNITY

Calgary’s regional active economy connects and builds community. We are committed to

ensuring everyone in our community, regardless of age, ability, background, or income, are empowered to participate in many roles within our regional active economy.

GOALS

1. By 2030, Calgary’s regional active economy leads Canada in representative governance.
2. By 2030, the Calgary region leads Canada in indicators of social cohesion.

PRIORITIES

Develop harmonized ecosystem-level strategies to increase physical activity within at-risk communities.

The ecosystem will collaborate to cultivate the next generation of leaders and innovators in the defined communities. This will involve developing and harmonizing the fragmented plans for these communities at a system level to ensure an efficient allocation of scarce resources on high-impact outcomes. This must include extensive community consultation, built resources and program needs analysis, a comprehensive business case and a detailed harmonized implementation plan. Part of this process is recognizing that in many communities, this may focus on embedding daily active living, as opposed to organized sport or recreation. Priority communities include:

1. Indigenous People
2. Persons of Colour
3. Seniors
4. Girls & Women
5. New Canadians (by respective community as appropriate)
6. LGBTQI2S+
7. Low Income Households
8. Youth (10-17)
9. Children (0-9)

10. Peoples with Disabilities

Commit to inclusive leadership

The ecosystem will collaborate to develop and deploy a strategy that commits that the leadership of Calgary’s regional active economy reflects the diversity of our community.

Collaborate to develop and deploy a strategy to develop human capital

The ecosystem will collaborate to develop and deploy a capacity-building strategy supporting increased diversity of the active economy labour force.

What Change May Look Like

- The harmonization in active economy infrastructure planning stimulates an acceleration of commercial and social programming to support marginalized communities.
- Technology is leveraged to maximize the usage of all active facilities and spaces.





PILLAR 4: INNOVATE AND GROW

The fragmentation of the current regional active economy has produced duplication and suppressed innovation. As an ecosystem, we will focus on driving growth through commercial and social innovators, enabled through targeted and intentional public sector investment.

GOALS

1. By 2030, Calgary leads Canada in direct economic contribution of the active economy to the regional GDP.
2. By 2030, Calgary leads Canada in active economy enterprise start-ups per capita.
3. By 2030, Calgary's regional active economy doubles its direct economic contribution to the regional GDP

PRIORITIES

A goal of public investment should be as an enabler for active entrepreneurs and social innovators to prosper.

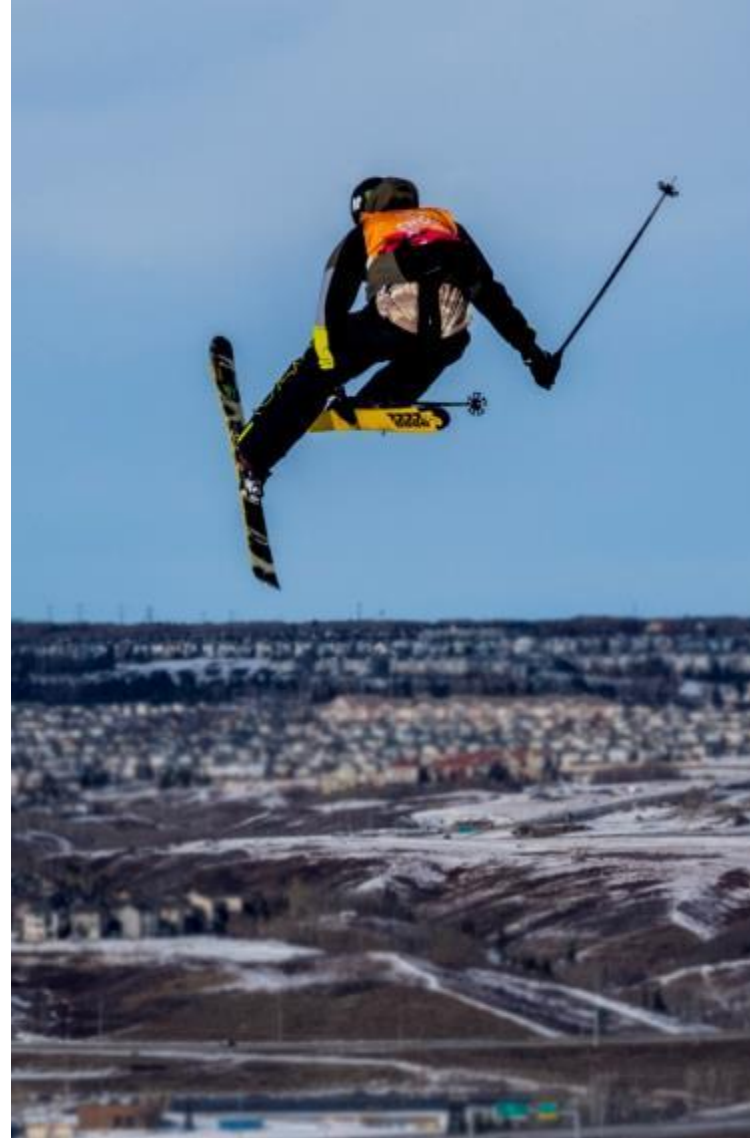
Develop and deploy an ecosystem scaling strategy

The ecosystem must explore alternative business models to drive the growth and prosperity of the ecosystem. This includes exploring and establishing an active economy incubation centre hosted in collaboration with existing organizations, such as Platform Calgary.

1. Explore targeted regional active economy investment funding
2. Develop professional development and learning pathways to grow the ecosystem.

Collaborative technology innovation

Pursue opportunities for collaborative technology adoption to advance the targeted goals of the Playbook.



What Change May Look Like

- Platform Calgary and the Active Calgary Foundation graduate the first cohort from the new Active Junction program. This nine-week program is designed to support active economy technology entrepreneurs to transition their idea to reality.
- The Active Calgary Foundation collaborates with all Calgary-based post-secondary institutions to launch an annual \$100,000 ActiveX competition to stimulate active economy innovation and develop entrepreneurial capacity in the regional ecosystem.
- Calgary strategically invests in new facilities and spaces to reflect the changing needs of our community, including artificial turf, spaces for both adults and children, and non-traditional local sports, such as cricket and padel.



PILLAR 5: DRIVE SUSTAINABILITY

Calgary's regional active economy must be sustainable and protected for future generations.

GOALS

1. By 2030, Calgary's regional active economy leads Canada in active economy energy consumption reduction.
2. By 2030, Calgary's regional active economy leads Canada in active economy water consumption reduction.

PRIORITIES

Develop and deploy a harmonized sustainability strategy for the ecosystem

The ecosystem will transition from fragmented enterprise-level sustainability planning to a harmonized sustainability strategy that will be implemented at an ecosystem-level by active enterprises.

Advocate for policies and harmonized investments that deliver a sustainable active economy

This will include advocating on the following areas:

1. Developing and deploying a comprehensive harmonized four-season active transportation plan.
2. School boards adopt harmonized policies that support active transportation by students.
3. By 2030, Calgary's regional active economy leads Canada in active economy waste reduction.
4. The City of Calgary commits to the active urban planning principles embedded in the municipal development plan and the city's transportation plan.
5. Integrated and harmonized regional transportation strategy.



What Change May Look Like

- A new regional railway connects Calgary international airport to downtown Calgary and then to Canmore, Banff, and Lake Louise. In the first year it reduces automobile traffic by 11 per cent.
- The Active Calgary Foundation launches a sustainability challenge leading to a 21 per cent reduction in energy consumption.



PILLAR 6: *INSPIRES* OTHERS

Calgary’s regional active economy is recognized by our community, Canadians and the world as a defining pillar in our community’s identity.

Showcase the active economy

Advocate for opportunities to showcase Calgary’s regional active economy to regional, national, and global audiences.

Publish an annual community impact report

Leverage open data and consistent scorecard metrics, with the ecosystem publishing an annual community impact report linking ecosystem activities and outputs to community impact measures.

Advocate for the recognition of the active economy at a municipal and provincial level.

Advocate for the regional active economy to be formally recognized as an emerging growth cluster. This must focus on removing historic siloed departmental structures of government that lead to inefficiency and inability to leverage strategies that achieve common goals.

GOALS

1. By 2030, Calgary’s regional active economy is recognized as a global leader in its contribution to economic, human, social and environmental prosperity.
2. By 2030, the Calgary region is recognized as a leader in delivering holistic and harmonized active, creative, and learning experiences.
3. By 2030, Calgary’s regional active economy is recognized as a global leader in its contribution to talent attraction and retention.
4. By 2030, the Calgary region is the leading destination for active economy enterprises.
5. By 2030 Calgary is recognized globally as the most active city in North America.

PRIORITIES

The ecosystem must collaborate and coordinate consistent and sustained key messaging about the leadership position of Calgary’s active economy. Our goal is that all members of our community

proudly identify as being engaged members of the active economy.

Develop and deploy an ecosystem-wide talent magnet strategy

Calgary’s regional active economy must be leveraged to develop, attract and retain the world’s best talent (both inside and outside of the active economy) to drive economic prosperity.

Develop and deploy an ecosystem-wide communication plan

Create consistent ecosystem-level communication tools to enable active economy members to amplify both weight and frequency of active ecosystem key messaging.

Identify global active economy events which amplify Calgary’s reputation as a world leader in the active economy.

Events may include national and global conferences, single and multisport events or other activities that align with the Playbook 2030 vision, and provide a measurable return on community prosperity.

What Change May Look Like

- The establishment of a 1 per cent allocation of all transportation capital infrastructure project to the Active Calgary Foundation accelerates active infrastructure and programming. Within five years, Calgary leads the country in physical activity, including having the highest level of active transportation in the country.
- The federal government chooses Calgary to pilot an allocation of the portion of gasoline tax to active programs.
- By 2030, eleven other jurisdictions in Canada and 23 worldwide introduce similar funding models to expand active infrastructure and programming.



10

IMPLEMENTATION PATH

“The rising tide lifts all the boats.”

John F. Kennedy

The scope of Playbook 2030 is one of the most ambitious and comprehensive plans in our region’s history. The eleven active economy sectors, encompassing multiple jurisdictions and 24 different policy areas provides a holistic and integrated lens to leveraging our community’s great competitive advantage – our active economy.

The very scope and ambition of Playbook 2030 has been critiqued as being unmanageable and unrealistic.

We agree...

In *ActiveCITY* summits hosted in 2019 and 2020, the challenge was made clear. The active ecosystem is fragmented, uncoordinated, inefficient and lacks leadership. It too often depends on anecdotes and not evidence. The Calgary 2026 Olympic and Paralympic plebiscite that was not passed in the fall of 2018 was simply the latest evidence of this. If we are to sustain what we have or continue its growth, we need a plan that recognizes sustained growth is not about any single organization. It is about raising the tide for all boats.

Over the past 18 months, the first eight sections of Playbook 2030 were methodically developed to form an evidence-based foundation. However, a plan is of no value unless there is a commitment to implementation. Section 9 presents a multi-staged implementation plan for the 4,000 enterprises in the regional active ecosystem. This section will now review the implementation principles and present a model to manage its implementation and a series of “quick win” priorities for the next 12 months. To succeed, the implementation must be owned by each enterprise and the 1.5M people engaged in the active economy. This means you!

IMPLEMENTATION PRINCIPLES

The implementation strategy for Playbook 2030 is based on four principles:

Principle 1: Deliver Quick Wins

The plan must identify quick wins to build momentum in the first 12 months. Quick wins incorporate projects that require no or little incremental resources, but can offer significant ecosystem-level value.

Principle 2: Sustained Commitment

Playbook 2030 is only the first step forward. The strategic pillars and actions in Playbook 2030 lay the foundation for implementation over the next decade. The success of Playbook 2030 depends on a sustained commitment and harmonized investment from commercial, social, and public enterprises across the region.

Principle 3: Recognize it is a Living Plan

Playbook 2030 is a flexible, living, and dynamic framework. As such, the Playbook will evolve as our community evolves. As a result, the

implementation must maintain a sustained commitment to ongoing community engagement over the length of the Playbook implementation. This plan is only successful if all 4,000 active economy enterprises and 1.5 million citizens own it - every single day.

Principle 4: Harmonized Planning and Reporting

The Playbook implementation must be harmonized across the commercial, social, and public ecosystems. This will demand harmonized implementation planning and reporting to ensure maximum impact on community prosperity. A critical step forward will be to further refine measurable goals for each pillar and associated harmonized ecosystem reporting.

IMPLEMENTATION PLAN

The Playbook implementation plan incorporates four dimensions.

1. *ActiveCITY* Collective transition
2. Establishment of harmonized program implementation governance
3. Delivery of quick wins
4. Prioritization of high-impact Playbook 2030 ecosystem projects



STEP 1: ACTIVECITY COLLECTIVE TRANSITION

The *ActiveCITY* Collective was established in June 2019, as an ad hoc collective of volunteers. This volunteer group committed 18 months to develop a long-term, ecosystem-level strategy for the active economy. This strategy is Playbook 2030.

The implementation of Playbook 2030 requires a sustained commitment by the ecosystem. In September 2020, an *ActiveCITY* sub-committee evaluated a range of models based on existing global benchmarking. This ranged from having this mandate embedded in the City of Calgary to creating an independent council of ecosystem enterprises. Independence, however, was deemed essential and we further recognized that the regional scope of the active economy transcends multiple political jurisdictions.

As a result, the sub-committee recommended establishing an **independent organization** to deliver on its advocacy and harmonization mandate.

At the final *ActiveCITY* Board meeting in November 2020, the Board established the *ActiveCITY* transition group (ATG) to manage the transition from the ad hoc volunteer collective to a sustainable backbone organization (referred to herein, as *ActiveCITY* Collective 2.0).

Role of the *ActiveCITY* Collective 2.0

The *ActiveCITY* Collective 2.0 will become the regional backbone organization for commercial, social and public sector organizations and individuals engaged in the Calgary regional active economy. The *ActiveCITY* Collective is independent and is not directly linked to commercial, social or public organizations.

The mandate of the *ActiveCITY* Collective 2.0 will include:

1. Advocating for the funding and implementation of Playbook 2030 by commercial, social and public stakeholders.
2. Facilitating increased collaboration and harmonization across the 4,000 organizations in the Calgary regional active economy.
3. Accelerating capacity building across the active economy.
4. Coordinating research to support the implementation of Playbook 2030.

Role of the *ActiveCITY* Transition Group

The ATG was established by the *ActiveCITY* Board on November 18th, 2020 and will dissolve on or before March 31, 2021. The ATG funding was provided by member organizations. The ATG will be composed of ten individuals selected by the co-chairs and be representative of the diverse active ecosystem. The ATG has the following mandate:

1. Develop a scope, budget, and governance model for *ActiveCITY* Collective 2.0.
2. Conduct a feasibility assessment of sustainable funding models to sustain *ActiveCITY* Collective 2.0 for a minimum period of three years.
3. Secure core funding for *ActiveCITY* Collective 2.0 before March 31, 2021.

City Experience Lab (CityXLab)

The implementation of the Playbook requires ongoing research and analysis. COVID-19 highlighted that many of the challenges and opportunities facing our region are anchored in delivering experiences across active, creative and learning ecosystems. To accelerate harmonization and the efficient allocation of scarce resources, the *Institute for Community Prosperity at Mount Royal University* established the *City Experience Lab* (CityXLab) in Fall 2020. This lab will facilitate collaborative research across all experience clusters, including active, creative and learning (Figure 9.1) to generate shared learning on emerging key issues. The *CityXLab* is institution agnostic and committed to mobilizing the innovation and capacity of all Calgary post-secondary institutions.



Figure-9.1. Harmonizing Research

STEP 2: ESTABLISH HARMONIZED PROGRAM GOVERNANCE

The implementation of the Playbook demands harmonized program management including three key stakeholder groups; *ActiveCITY Collective 2.0*, the *City of Calgary*; and the *City Experience Lab*. Refer to Figure 9.2.

City of Calgary Active Economy Champion

The City of Calgary currently invests in excess of \$320M in the active economy across five service areas:

- Parks & Open Spaces
- Recreation
- Transportation
- Livable Streets
- Urban Forestry

As the single largest investor in the active economy, the City of Calgary must work to harmonize and coordinate all municipal active economy investments to ensure maximum alignment with the Playbook. We propose that the City of Calgary appoint an Active Calgary champion to harmonize active economy investment and be a focal point for the *ActiveCITY Collective* and the 4,000 commercial, social and other public sector enterprises (e.g. philanthropic, school boards, governments etc.).

Active Calgary Champions Council

We propose that the *ActiveCITY Collective*, in partnership with the City of Calgary, establish the Active Calgary Champions Council. This council will be co-chaired by the Executive Director of the *ActiveCITY Collective* and the City of Calgary active champion. This Council is modelled after an approach adopted in Edmonton. The Council will meet quarterly and include the following active stakeholders:

- Sport Calgary
- Federation of Calgary Communities
- Indigenous partners
- Regional partners
- School Boards
- Post-secondary institutions
- Alberta Health Services
- Wellness partners
- Recreation partners
- Bike Calgary
- Sustainable Calgary
- WinSport
- Canadian Tire
- Calgary Sport & Major Events Committee
- Calgary Rivers Users Alliance
- Calgary Stampede
- Calgary Sports & Entertainment
- Spruce Meadows



Figure-9.2. Aligning Priorities

STEP 3: DELIVER QUICK WINS

QUICK WIN 1: IMPLEMENT RIGOROUS ADVOCACY GOVERNANCE PROCESS

The current regional active economy is fragmented across narrow organization or sector interests, with no single organization mandated to mobilize and harmonize active advocacy across the 4,000 enterprises and 1.5M citizens engaged in today’s active economy. The central role going forward for the *ActiveCITY* Collective will be to play this advocacy harmonization role. To do so, the *ActiveCITY* Collective must establish a transparent governance process. This process incorporates six major steps outlined in Figure 9.3.

Step 1- Identify Priority Policy Areas: The *ActiveCITY* Board will define priority policy areas. These will be anchored in the vision and pillars defined in Playbook 2030.

Step 2 - Map Stakeholders: Once a policy area is defined by the Board, the *ActiveCITY* Collective management will collaborate with the *active experience* research program lead of the CityXLab to map key stakeholders. This mapping may incorporate active ecosystem stakeholders, governments, funders and others.

Step 3 - Refine Evidence: If required, the *active experience* program of the CityXLab will be commissioned to conduct incremental research to support the development of an evidence-based policy position. This may include new primary research and/or secondary research. A core requirement will be to ensure that the *ActiveCITY* Collective is provided best practice benchmarking to support its policy position.

Step 4 - Define Policy Position: *ActiveCITY* Board approves a policy position and decides to advocate on this position. This decision will evaluate potential competing interests within the Collective. The Board may choose not to adopt a Collective position on specific policy areas where there are competing interests.

Step 5 - Establish Advocacy Plan: *ActiveCITY* Collective management, in partnership with other ecosystem stakeholders, develops a harmonized advocacy plan.

Step 6 - Engage Stakeholders: The *ActiveCITY* Collective oversees the deployment of the advocacy plan. The *ActiveCITY* Board is engaged with regular updates.

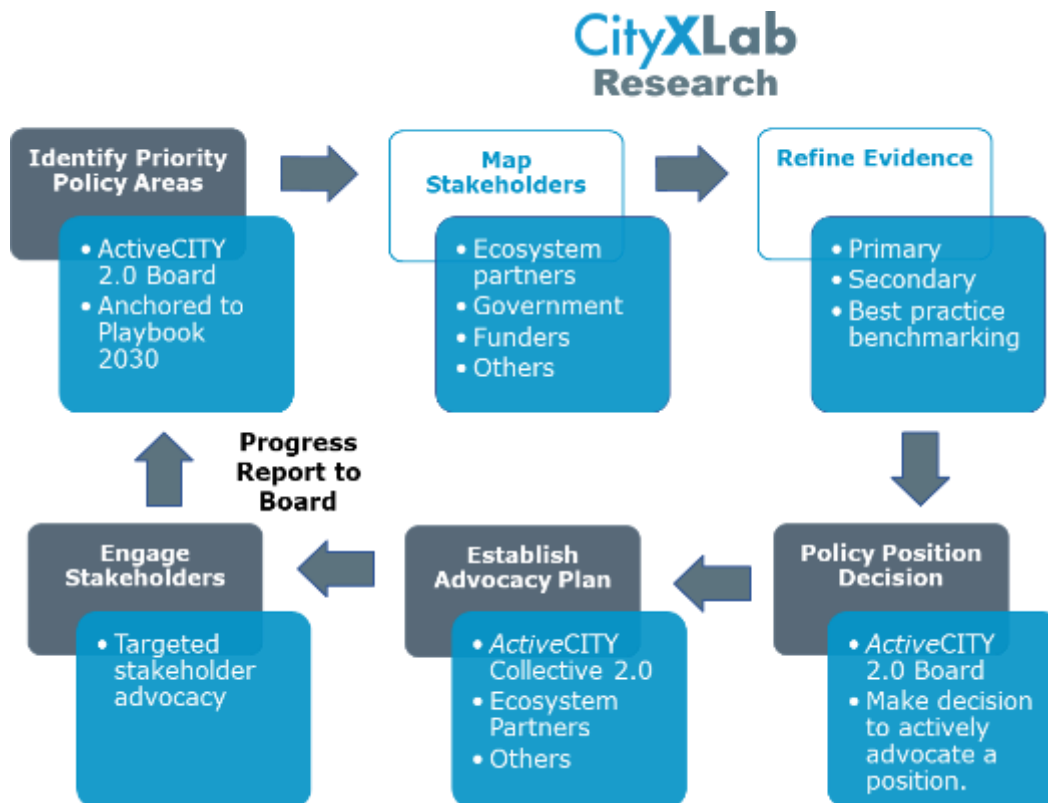


Figure-9.3. Advocacy Governance

QUICK WIN 2: ESTABLISH PRIORITY WORKING GROUPS

Goal: ActiveCITY Collective 2.0 facilitates ecosystem working groups on priority issues identified in Playbook 2030. These working groups will be mandated to develop comprehensive policy positions and associated ecosystem-level strategies for ongoing advocacy.

Scope: The first three working groups to be established will include:

Inclusive Active Economy Working Group: This working group is mandated to develop a comprehensive ecosystem-level strategy to deliver on the 2030 inclusivity goals.

Active Transportation Working Group: This inter-organization working group will collaborate with other civic organizations committed to deployment of essential active transportation policy and infrastructure.

Active Infrastructure Working Group: This working group is mandated to conduct a comprehensive commercial, social and public active infrastructure audit at a community level (refer to Quick Win 4). The goal is to identify gaps or opportunities across the full active ecosystem.

Capacity Building Working Group: This working group is mandated to identify explicit constraints to capacity building across the active ecosystem. This may include financial, structural or human capital.

Outcome: Each working group will report directly to both the Champions Council and the ActiveCITY Collective. They will be asked to provide reports within six months of their establishment with comprehensive, but actionable recommendations.

Resource Needs: Incremental resources may be required to support research needs of the respective working groups.

QUICK WIN 3: 2030 GOVERNANCE STUDY

Goal: Playbook 2030 highlighted a concern that the governance of the Calgary regional active economy is not representative of our community in 2020.

Scope: Conduct board audits of all Calgary regional active economy enterprises. This will be complemented by one-on-one interviews with regional active economy leadership.



Outcome: If this study identifies that the active economy governance is not representative, it will identify potential pathways to transitioning to a representative governance model based on best practices in other jurisdictions.

Resource Needs: Funding to support undergraduate research assistants to conduct a literature review and board audit.

QUICK WIN 4: COMMUNITY INFRASTRUCTURE AUDIT

Goal: Ecosystem-level mapping of active infrastructure at a community level to identify gaps and opportunities.

Scope: Conduct a comprehensive commercial, social, and public active infrastructure audit at a community level.

Outcome: A detailed baseline of all active infrastructure at a community level and associated methodology for aligning active investment to future community needs.

Resource Needs: Funding to support undergraduate research assistants to conduct audits.

QUICK WIN 5: ACTIVE ECONOMY IMPACT TOOL KIT

Goal: Playbook 2030 highlighted a concern that citizens and policymakers do not recognize the direct value of the active economy on our community's prosperity.

Scope: Active economy partners have direct relationships with an estimated 95 per cent of the Calgary population. The hope here is to develop a marketing community toolkit to be distributed to the 4,000 organizations in the active economy. This toolkit will incorporate consistent key messages and digital tools that can be amplified by active economy partners.

Outcome: Raise and sustain broad awareness of the empirical impact of the active economy on community prosperity.

Resource Needs: Support to design the toolkit. This may be in the form of a pro bono design support or financial support to hire a designer.



APPENDIX

APPENDIX-1: GLOSSARY³²⁴

Accessible: Able to access and participate in a wide choice of quality programs, services and facilities.

Active Products & Gear: Development, manufacturing and sales of products and gear associated with active living, organized sports and active recreation development or delivery.

Active Design & Infrastructure: Includes all commercial, not-for-profit, and public infrastructure required for delivering organized sports and active recreation experiences. Scope includes the design, construction, maintenance, repair, operation, and the supervision of infrastructure and open spaces.

Active Economy: defined as incorporating organizations that participate in, or contribute to, improving individual and/or community level prosperity through the development and delivery of sport, physical activity, and active recreation experiences. This involves eleven interdependent sectors including organized sports, active recreation, health & wellness, design & infrastructure, and tourism.

Active Ecosystem: The active ecosystem as incorporating all organizations who participate in, or contribute to, improving individual or community prosperity through the development and delivery of sport and active recreation experiences. This involves eleven interdependent sectors including organized sports, active recreation, health & wellness, design & infrastructure, and tourism.

Active Economy Stakeholder: Any individual or organization that has an interest in, or is impacted by, the active ecosystem. This includes all forms of engagement in the active economy which can either be in a professional or volunteer capacity. Another way of viewing engagement is through specific roles such as participant, administrator, enabler, policymaker, and supporter. Where this gets complicated is when people hold multiple roles within the same realm.

Active Equipment & Accessories: Development, manufacturing and sales of equipment and accessories associated with active living, organized sports and active recreation development or delivery.

Active for Life: Refers to participants who have a desire to be physically active.

Active Living: Active living is a sector of the active economy embedding unstructured activity as part of their daily living. Examples include active transportation and commuting, gardening, proactive stair use.

Active Media & Content: Media and content directly associated with active living, organized sports and active recreation development or delivery. Includes Broadcast rights holders, media organizations and sponsors of sport and active recreation.

Active Modes: Non-motorized travel, primarily walking and cycling but also includes rollerblading and movements with mobility devices.

Active Professional Services: Professional services directly associated with sport or active recreation development or delivery.

Active Recreation: The activities engaged in for the purpose of relaxation, health & wellbeing or enjoyment with the primary activity requiring physical exertion. They are often spontaneous in nature and participant led, with a low level of organization and limited structure.

Active Tourism: Tourism directly associated with active living, organized sports and active recreation development or delivery.

Active Transportation: Refers to any form of human-powered transportation, such as walking, cycling, using a wheelchair, in-line skating or skateboarding.

Administrator: One whose role supports the development and/or delivery of active living, organized sports and active recreation experiences. Administrators may be volunteer or professional.

Age-Friendly Communities: In an age-friendly community, the policies, services and structures related to the physical and social environment are designed to help older people "age actively". In 2014, over 400 cities and communities in Canada were involved in this global movement.

Amenity: A component of a recreation facility where an activity takes place such as a pool basin, sport field, gymnasium, or multi-purpose room.

Arts: Includes all forms of creative expression, including formal and informal arts, as well as art made in for-profit and not-for-profit settings. This definition includes traditional definitions of art, such as the performing arts, literary arts, visual

arts and the applied arts. The definition is also meant to capture the broad range of arts that impact the everyday lives of Calgarians.

Benchmarking: A standardized method for collecting and reporting critical operational data in a way that enables relevant comparisons among the performances of different organizations or programs, usually with a view to establishing good practice, diagnosing problems in performance, and identifying areas of strength. Benchmarking gives the organization (or the program) the external references and best practices on which to base its evaluation and to design its working processes.

Bicycle (Bike) Lane: An on-street travel lane designated for the exclusive use of bicycles.

Big Data: Large data sets analyzed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions.

Built Environment or Built Form: The engineered surroundings that provide the setting for human activity and includes buildings, streets, and structures (including infrastructure).

Business Intelligence: Business intelligence refers to skills, technologies, applications and practices used to help a business acquire a better understanding of its commercial context. Business intelligence may also refer to the collected information itself.

Calgary Metropolitan Plan: A regional plan to guide long-term growth and development for members of the Calgary Regional Partnership.

Canadian Physical Activity Guidelines and Canadian Sedentary Behaviour Guidelines: The Canadian Physical Activity Guidelines (2011) describe the amount and types of physical activity that offer substantial health benefits to children (from infancy to age 12), youth, adults and older adults. The Canadian Sedentary Behaviour Guidelines provide recommendations to Canadian children and youth on limiting sedentary behaviour during discretionary time in order to reduce health risks.

Canopy Cover: The area covered by tree and forest foliage.

Carbon Footprint: The amount of carbon dioxide released into the atmosphere as a result of the

activities of a particular individual, organization, or community.

Census Metropolitan Area (CMA): Urban Census metropolitan area (CMA) is an area consisting of one or more neighbouring municipalities situated around a major urban core. A CMA must have a total population of at least 100,000 of which 50,000 or more live in the urban core.

Collaborations: A process that involves a mutually beneficial relationship between parties that builds on shared outcomes.

Community: A group of individuals, families or organizations that shares common values, attributes, interests and/or geographic boundaries.

Community Prosperity: A multi-dimensional construct, framed by value judgements incorporates four interdependent perspectives on value: Economic, social, human, and environmental. *Economic value* includes the total level of economic activity in the defined area and is assessed according to measures such as economic outputs and employment levels. *Social value* is a multi-dimensional construct incorporating features of social organization that contribute to society by facilitating harmonized actions. Social value, first and foremost, accrues at a community level. Examples of social impact include measures of trust, safety, social connections, civic engagement, and tolerance. The existence of these at a community level is then what creates value for the individual members of a community. *Human value* includes an individual's skills, knowledge, mental and physical health.³²⁵ Measures associated with human impact may include health & wellness, life expectancy, education, and competencies. *Environmental value* includes measures associated with the health and sustainability of a community's natural resources. Herein, the Playbook views "community prosperity" and "livability" as a single construct.

Commuter: A person travelling from home to their place of work/school and vice versa.

Competitive Sport: Calgarians have the opportunity to systematically improve and measure their performance against others in competition in a safe and ethical manner.

Congestion: A condition lasting 15-minutes or longer where travel demand exceeds the design capacity of a transportation facility.

Crime Prevention Through Environmental Design (CPTED): The proper design and effective use of the built environment, which may lead to a reduction in the fear and incidence of crime and an improvement in quality of life.

Culture: The collection of distinctive traits, spiritual and material, intellectual and affective, which characterize a society or social group. It is a broader concept than “arts”, comprising modes of life, human rights, value systems, traditions and beliefs.

Cycle Track: Dedicated space for bicycles built into street right-of-way. It is physically separated from both vehicle travel lanes and sidewalks to improve safety and efficiency for all modes of transportation.

Demographic Changes: Changes to the size, composition or structure of the population.

Diversity: All of the ways in which individuals differ, including but not limited to ability, age, sex, sexual orientation, race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, family, or marital status.

Economy: The term economy refers to the institutional structures, rules and arrangements by which people and society choose to employ scarce productive resources that have alternative uses in order to produce various goods over time and to distribute them for consumption, now and in the future, among various people and groups in society. In a free market economy like Canada’s, the laws of supply and demand determine what, how and where goods and services should be produced, who should consume them and when. A “strong” or “healthy” economy is usually one that is growing at a good pace.

Ecosystem: A dynamic system of plants, animals and other organisms, together with the non-living components of the environment, that functions as an interdependent unit.

Employment Rate: The number of employed persons expressed as a percentage of the working age population.

Enabler: One whose role enables others to participate in active living, organized sports and active recreation experiences. Enablers may be volunteer or professional.

Equity: Means people receive tailored treatment according to their respective needs and social

conditions. It requires recognition that different barriers, often systemic, exist for diverse individuals or groups. The result of equity is all people have the opportunity to benefit equally.

Evidence-Based Decision Making: Decisions are made based upon clear and concrete evidence developed through sound research and information gathering practices.

Fifteen Minute City: A design principle where citizens can access all their amenities in terms of work, retail and leisure within 15-minutes’ walk or cycle ride of their home.³²⁶

Full-time Equivalent (FTE): A full-time position (35 – 40 hours per week) or a combination of positions (in whole or in part) that provide the same number of working hours as a full-time position.

Fundamentals: Means participants develop fundamental movement skills in structured and unstructured environments for play. The focus is on providing fun, inclusive, multisport, and developmentally appropriate sport and physical activity resulting in participants developing a wide range of movement skills along with the confidence and desire to participate.

Greenhouse Gas (GHG) Emissions: Gases emitted to the atmosphere which contribute to the greenhouse gas effect, in which more than the normal amount of atmospheric heat is retained in the atmosphere. These emissions include water vapour, carbon dioxide, nitrous oxide, methane, ozone, halocarbons and other chlorine and bromine-containing substances. (Jenn K asks if this is correct – no idea!)

Gross Domestic Product (GDP): GDP is a measure of the value of all goods and services produced by the economy. Unlike Gross National Product (GNP), GDP only includes the values of goods and services earned by a region or nation within its boundaries.

Health: Defined by the World Health Organization (WHO) as “a state of complete physical, social and mental wellbeing, and not merely the absence of disease or infirmity”. The Ottawa Charter for Health Promotion goes on to say, “Health is a resource for everyday life, not the object of living. It is a positive concept emphasizing social and personal resources as well as physical capabilities.”

Health & Wellness; Are products and services supporting the delivery or engagement in organized sports or active recreation. Includes areas such as traditional & complementary medicine, preventive & personalized medicine and public health, nutrition, and workplace wellness.

Healthy Cities/Communities: Create and improve the physical and social environments and community resources, which enable people to mutually support each other in performing all the functions of life and developing to their maximum potential. Several cities and communities in Canada have adopted Healthy City strategies.

High Performance Sport: Calgarians are systematically achieving world-class results at the highest levels of competition through fair and ethical means.

Inclusion: Means creating environments in which any individual or group is respected and valued. The result of social inclusion is that people feel they belong and can fully participate in society.

Inclusive Growth: An approach to growth and development where the benefits are shared broadly.

Indicators: Refers to a measure of wellbeing which helps quantify the achievement of the result.

Infrastructure: The technical structures that support a society, including roads, transit, water supply, sewers, power grid, telecommunications, etc.

Innovation: The act or process of innovating; something newly introduced; a new method, custom, device, etc.

Intangible Active Economy Resources: Includes human resources (intrinsic or learned knowledge, skills and experiences at both an individual and collective level); social resources (the intrinsic value of social relationship that contribute to community building); and structural resources (the processes that facilitate community and collaboration).

Introduction to Sport: Calgarians have the fundamental skills, knowledge and attitudes to participate in organized and unstructured sport.

Labour Force: The working age population (aged 15+) who are actively involved in the labour market, which includes those employed and unemployed people. It does not include people

who are at their working age but not working or looking for work.

Legacy: Refers to the intentional extension of the benefits of bidding and hosting beyond the delivery of a specific event, to build sustainable capacity for the local active economy sector.

Legacies:

- Is planned for, operationalized and measured;
- May occur prior to, during, or following an event;
- Include programming for athletes, coaches, officials, leadership or community development, new or improved infrastructure (inclusive of ongoing operating and programming), distribution of physical assets or equipment, sharing of intellectual property or transfer of knowledge, and the establishment or management of trust funds; and
- May be linked to an event's wind-up, surplus, or include contributions specifically for legacy activities.

Life-long Learning: Opportunities for continuous growth and development across the lifespan.

Low Carbon Economy: An economy that is based on the need to reduce the release of carbon dioxide into the atmosphere.

Master Plan: A plan or illustration which sets out the overall structure or layout of new development. Often used to convey a development concept or image of the development rather than specify detailed design issues.

Mixed-Use Development: Development which encompasses a variety of different land uses within close proximity. Can refer to adjacent buildings which accommodate different land uses, or different land uses which are accommodated within a single building or group of buildings.

Municipal Development Plan: A statutory plan that guides the future growth and development of a municipality as it relates to transportation, housing, economic activity, recreation, the environment, social issues and other matters.

Open Spaces: Refers to city-owned land primarily used to provide spaces for accessible public recreation and aligns with other uses. Examples include continuous pathways, sport fields, athletic parks, regional parks, outdoor

multisport courts, wheeled sport parks, playgrounds and golf courses.

Organized Sports: The activities involving physical exertion, skill as the primary focus of the activity, with elements of competition where rules and patterns of behaviour governing the activity exist formally through organizations.

Outcomes: The actual effect, impact, benefit or change for the participant(s), the community, or the city during or after the program or service.

Outcome-Based: Making decisions and taking actions with a focus on the desired outcomes.

Participant: One that partakes in an active living, organized sports and active recreation experience.

Participation: Refers to participants taking part in active behaviours.

Partner: means an independent organization that agrees to collaborate with The City to deliver positive results for Calgarians.

Partnership: A formalized working relationship between The City of Calgary and one or more social organizations with independent accountabilities, in which they agree to co-operate on the delivery of a program, project, or service to fulfill the objectives of The City.

Pathway: An off-road, multi-purpose thoroughfare controlled by The City of Calgary and set aside for use by pedestrians, cyclists and persons using wheeled conveyances. Improved by asphalt, concrete or brick, and includes any bridge or structure with which it is contiguous.

Pedestrian-oriented or Pedestrian-friendly: An environment designed to make travel on foot convenient, attractive and comfortable for various ages and abilities. Considerations include directness of the route, interest along the route, safety, amount of street activity, separation of pedestrians and traffic, street furniture, surface material, sidewalk width, prevailing wind direction, intersection treatment, curb cuts, ramps and landscaping.

Performance Measures: Refers to how well a program, agency or service system is working in terms of quantity, quality, and effect on Calgarians' lives.

Physical Literacy: The motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life.³²⁷

Placemaking: The collaborative and integrated process of planning, designing and building places, so that they are successful, enduring and attractive for people.

Play: Freely chosen and self-directed mental or physical activity that is undertaken for enjoyment and that is separate in some way from "real" life.

Policymaker: One who is a member of a government department, legislature, or other organization who is responsible for developing and implementing active economy policy, including in the organized sports, active recreation, and health & wellness sectors.

Preventative Healthcare: The act of providing care to prevent the onset of disease or health problems rather than treating the disease itself. These can be simple activities, such as healthy eating or getting more exercise.

Productivity: A measure of how well an organization uses its resources (inputs, such as labour and capital) to produce goods and services (outputs) and is typically expressed as a ratio of outputs to inputs. As such, productivity is a measure of efficiency.

Public Bike Share System: A public bike share system is a service that responds to the needs of trips almost long enough for a public transit bus ride but perhaps too short for a taxi ride. It consists of a network of bicycle stations that are closely spaced and placed in strategic locations for ease of use. After registering or providing a small deposit, riders can pick up a bicycle from one docking station and, when finished, drop it off at another.

Public Engagement: Opportunities Recreation provides for the public and interested stakeholders to provide input. This ensures that the provision of products, services and facilities are meeting the needs of Calgarians.

Public Recreation: The provision of recreation services by governments and non-governmental groups and organizations for the benefit of individuals and communities.

Public Value: Simply defined as "what the public values". While public value is clarified and authorized by the public, it is created by public service organizations (e.g. municipal Recreation business units) in decisions about what services to provide and how to provide them.

Quality of Life: Quality of life is the overall enjoyment of one's life. It is a healthy balance between work and family life, vocation, recreation, accumulating wealth and maintaining good health.

Quality Sport Experience: Refers to the planned, progressive, inclusive learning experience that acts as the foundation for lifelong engagement in active behaviours. The learning experience offered through lessons should be developmentally appropriate to help participants acquire the psychomotor skills, cognitive understanding, and social and emotional skills needed to lead a physically active life.

Recession: A period in which the economy experiences two consecutive quarters of gross domestic product decreases. During this temporary period there is a decline in industrial production and trade.

Recreation Amenities Gap Analysis (RAGA): A large-scale research study completed in two phases to inform the development of the Recreation Master Plan. It explored the recreation needs and preferences, motivation, satisfaction, gaps, barriers and opportunities on a city-wide basis. The research consisted of demographic analysis, research synthesis, stakeholder consultation, telephone surveys and focus group research. Altogether RAGA included quantitative feedback from 6000 Calgarians throughout the city, plus qualitative feedback gathered through eight focus groups which targeted specific demographic and regional cohorts.

Recreation and Sport Infrastructure: Includes the construction, maintenance, repair, operation, and the supervision of facilities and outdoor areas. Indoor spaces and places include arenas, community centres and halls, indoor pools, cultural centres, senior, youth and child centres. Outdoor spaces and places include parks, playing fields, play-structures, trails, forested areas, outdoor pools, splash pads, pavilions, gardens, waterfronts, marinas, outdoor courts (e.g., tennis, basketball), outdoor rinks and golf courses.

Recreational Open Space: Part of the Open Space Network; lands that are acquired or dedicated to providing areas for public recreation, such as but not limited to, sports fields, neighbourhood parks and cemeteries.

Recreational Sport: Calgarians have the opportunity to participate in sport for fun, health, social interaction and relaxation.

Redevelopment: The creation of new units, uses or lots on previously developed land in existing communities.

Regional Pathway System: A city-wide linear network that facilitates non-motorized movements for recreation and transportation purposes. The spine of the system parallels the major physical features of the river valleys park system, including waterways, escarpments and ravines. It connects communities by linking major parks, recreation facilities and natural features. The regional pathway system may also link other major community facilities such as schools, community centres and commercial areas. The regional pathway is hard surfaced, typically asphalt and located off-street. It is a multi-use facility and no one user or type of user is to be given elevated status.

RouteAhead: A City of Calgary policy that sets out a strategic plan for transit.

Sense of Place: A person's or community's appreciation of the special qualities of their neighbourhood, city or environment that is different from other places.

Shared Lane: On a street, a travel lane closest to the curb that is wide enough to accommodate motorists and cyclists side by side in a safe manner and identified by pavement marking and signage.

Shared Spaces: Street spaces in which the traditional segregation between cars, pedestrians and cyclists is minimized, usually through the customization of street markings and the removal of features such as raised curbs and footpaths.

Social Capital: The features of social organization such as social networks, norms and social trust that facilitate harmonization and cooperation for mutual benefit.

Social Cohesion: Social cohesion is the ongoing process of developing a community of shared values, shared challenges and equal opportunity within a community, based on a sense of trust, hope and reciprocity among all its members. Central to social cohesion is the willingness of people to work together to create a prosperous community for everyone. Elements include trust in

the community's people and institutions, respect for diversity, a sense of belonging, reciprocity (people contribute even when there may be no direct personal benefit) and participation of people in community decision making. Social cohesion is sometimes referred to as the bond or glue that keeps people together.

Social Conditions: Means the variables that impact an individual's quality of life, access to opportunities, or lived experience. Positive social conditions may require that policies, plans, strategies, programs and services be delivered equitably in order to advance equality.

Social Connectedness: A person's number of close friends, frequency of interactions with family and friends, trust in neighbors, and level of participation in volunteer activities or community events all play a role in supporting wellbeing and can also influence health, both directly and indirectly. Together, these examples begin to describe social connectedness - the extent to which people interact with one another, either individually or through groups.

Social Connections: Social connections are the networks that are built when people come together around a common interest or purpose. Generally, these networks begin with people who are unlike one another except for the common interest or purpose³². Through these social connections people develop common understandings and become connected with people unlike themselves.

Social Infrastructure: The system of services, networks and facilities/assets that support people and communities. It comprises a broad spectrum of community assets and may be:

- provided by the public sector, the private sector or non-governmental organizations
- open space or supporting services and activities
- physical facilities and the people involved in the delivery of services or the actual services themselves
- operating at the local, sub-regional or regional level.

Social Mobility: Shifting from one social status to another, commonly to a status that is either higher or lower. It refers both to the ability of individuals to change status over time, and for

individuals to have a different status to that of their family.

Sport: Involves participants who execute skills that require practice and preparation; it involves competition with other participants, oneself, or nature; and it occurs in a structured environment. The definition consists of organized sports and unstructured sport:

- Organized sports refer to activities which involve training or competition with some level of physical intensity or organization. It does not include activities in which the performance of a motorized vehicle is the primary determinant of the competitive outcome. Games of skill such as billiards board games, and electronic games are not included.
- Unstructured sport refers to sport-like activities that are often spontaneous in nature and participant led with a low level of organization and may include games with rules. Unstructured Sport provides participants with numerous learning opportunities and a context to be physically active while having fun, usually without a formal club structure.

Sport Betting: Predicting organized sports results and placing a wager on the outcome. Includes areas such as lotteries, casinos, fantasy sports and horse racing.

Sport Centres: Refers to facilities built, designed and operated to achieve a core objective of training and competition for the development of competitive and high-performance athletes. Sport centres commonly deliver on recreation needs to the general public and excellence as a dual mandate. Sport centres are typically located on city-owned land, operated by The City or a partner and may be tax-supported.

Sport Sector: Refers to the members of the community indirectly or directly involved in sport, how they interact, and their contributions to the development and delivery of sport. The sport sector includes local sport organizations, community organizations, other sectors such as health, recreation, education and the private sector. It also includes other orders of government, provincial sport organizations, national sport organizations, and multisport organizations.

Sports Fields: Developed open space providing educational and recreational opportunities for

specialized sports activities; traditionally baseball, softball and soccer, with some fields for non-traditional uses including rugby, lawn bowling, cricket, field hockey, etc.

Stewardship: Managing, caring for and maintaining assets.

Streetscape: All the elements that make up the physical environment of a street and define its character. This includes paving, trees, lighting, building type, style setback, pedestrian, cycle and transit amenities, street furniture, etc.

Structural Discrimination: When an entire network of rules and practices disadvantages less empowered groups while at the same time serving to advantage the dominant group.

Supporter: One who supports or motivates others to participate in active living, organized sports and active recreation experiences.

Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own needs. It includes environmental, economic and social sustainability.

Tangible Active Economy Resources: Includes built resources (Facilities developed to facilitate sport or active recreation); natural resources (natural resources that can be leveraged to support sport or active recreation); economic resources (public and private financial resources available for investment in the active economy).

Trails: Constructed linear paths with a granular surface and are generally located in natural areas. As a management tool they identify intended public routing and can formalize desire lines to minimize the impact on the natural environment.

Transit-oriented Development (TOD): A compact, mixed-use community within walking distance of a transit stop, that mixes residential, retail, office, open space and public uses in a way that makes it convenient to travel on foot or by public transportation instead of by car.

Transportation Infrastructure Investment Plan (TIIP): A plan defining the priority and timing of infrastructure projects for the Transportation Department. This program of system improvements defines the overall transportation capital investment plan for a 10-year period and provides information to Council to prepare capital budgets for three-year business planning cycles.

Triple Bottom Line (TBL): TBL is an approach that considers economic, social and environmental implications in decision-making processes. TBL is a departure from making decisions based only on the financial bottom line, reflecting a greater awareness of the impacts of decisions on the environment, society and the external economy – and how those impacts are related

Underrepresented Groups: Refers to groups of Calgarians that do not participate in active ventures at the same rate as Calgarians as a whole. These groups commonly include some women and girls; socio-economically disadvantaged Calgarians; Indigenous peoples; persons with a disability; newcomers which include recent immigrants; refugees and new Canadians; older adults; and members of the LGBTQI2S+ community.

Unemployment Rate: In Canada, the unemployment rate measures unemployment and is expressed as a percentage of the total labour force, which is the total number of people who are 15 years of age and over who are either employed or unemployed.

Urban Forest: All the trees and associated vegetative understory in the city, including trees and shrubs intentionally planted, naturally occurring or accidentally seeded within the city limits.

User Friendly/Barrier Free: An environment designed to make movement fast, attractive, and comfortable for various ages and abilities (e.g. visual and hearing impaired, mobility impaired, developmentally challenged, situational impaired, etc.). Considerations include separation of pedestrian and auto circulation, street furniture, clear directional and informational signage, safety, visibility, shade, lighting, surface materials, trees, sidewalk width, prevailing wind direction, intersection treatment, curb cuts, ramps, landscaping, etc.

Vulnerable Communities: Communities with a limited capacity to anticipate, cope with, resist and recover from the impact of a major negative event.

Walkability: Walkability is the measure of the overall walking and living conditions in an area and is defined as the extent to which the built environment is friendly to the presence of people

walking, living, shopping, visiting, enjoying, or spending time in an area.

Walkable Communities: The area generally defined by a 400m or 5-minute walk from a local or neighbourhood centre. Walkable neighbourhoods have an interconnected and safe walkable street network, where shops, schools, public transport, community facilities and other buildings are in easy walking distance.

Wayfinding: A term used to describe how people respond to the built environment to orient themselves. Elements that contribute to wayfinding include reference points such as signage, natural areas or parks, landmark buildings, bridges, distinctive lighting, public art, etc.

Wellbeing: The presence of the highest possible quality of life in its full breadth of expression, focused on but not necessarily exclusive to: good living standards, robust health, a sustainable

environment, vital communities, an educated populace, balanced time use, high levels of democratic participation, and access to and participation in recreation and culture.

The Framework vision incorporates:

- Individual wellbeing: Individuals with optimal mental and physical wellbeing, who are engaged and contributing members of their families and communities
- Community wellbeing: Communities that are healthy, inclusive, welcoming, resilient, and sustainable
- The wellbeing of places and spaces: Natural and built environments that are appreciated, nurtured and sustained.

APPENDIX-2: GLOBAL BENCHMARKS

Report Title	Year	Jurisdiction
Transportation Action Plan	2020	Minneapolis, MN, USA
Live Better Through Sport Vision 2030	2019	Singapore
Combined authority transport plan - facilitating Inclusive Economy	2019	Liverpool, UK
The Connected City - Oberbillwerder Masterplan	2019	Hamburg, Germany
Liverpool City Region Combined Authority: Local Cycling and Walking Infrastructure Plan (LCWIP)	2019	Liverpool, UK
Future of Mobility: Urban Strategy	2019	Britain
Health and wellbeing for Everyone	2019	Helsinki, Finland
Implementation Framework for Phase VII (2019–2024) of the WHO European Healthy Cities Network: Goals, Requirements and Strategic Approaches	2019	WHO: Europe
Building Global Active Cities for Tomorrow - Pacte Project	2019	Europe
Action Plan for better mental health 2019-23	2019	Copenhagen, Denmark
Sport 2030: Participation, Performance, Integrity, Industry	2018	Australia
The Bicycle Account - Copenhagen: City of Cyclists	2018	Copenhagen, Denmark
Auckland Plan 2050	2018	Auckland, New Zealand
Healthier and happier for all - A transformative approach for safe, inclusive, sustainable, and resilient societies	2018	Copenhagen, Denmark
Belfast Charter for Healthy Cities	2018	Belfast, UK
Active Victoria: A strategic framework for sport and recreation in Victoria 2017 – 2021	2017	Victoria, Australia
Urban Green Spaces: a brief for action	2017	WHO: Europe
TAFISA Mission 2030	2017	Global
City of Amsterdam Research Report - City Streets	2017	Amsterdam, Netherlands
Beaverton Active Transportation Plan	2017	Beaverton, OR, USA
Copenhagen: City of Cyclists - Facts and Figures	2017	Copenhagen, Denmark
The Most Functional City in the World - Helsinki City Strategy 2017-2021	2017	Helsinki, Finland
Successful Ageing in Singapore: Urban Implications in a High-density City	2017	Singapore
I feel young in my Singapore! - Action Plan for Successful Ageing	2016	Singapore
A Guide for City Leaders: Designed to Move Active Cities	2015	New York & 8 other cities
Is a healthy city also an age-friendly city?	2015	WHO Europe
Active Design: Planning for health and wellbeing through sport and physical activity	2015	England
Making London the Most Active City in the World	2015	London, England
Berlin Strategy - Urban Development Concept Berlin 2030	2015	Berlin, Germany
Enjoy Life, Copenhageners -City of Copenhagen Health Policy	2015	Copenhagen, Denmark
Better Mobility in Copenhagen	2014	Copenhagen, Denmark
Active Design - Shaping the Sidewalk Experience	2013	New York, USA
The Walkable City - Stockholm City Plan	2010	Stockholm, Sweden
Chicago Riverwalk: Main Branch Framework Plan	2009	Chicago, IL, USA
A healthy city is an active city: a physical activity guide	2008	WHO: Europe
Game Plan: a strategy for delivering Government's sport and physical activity objectives	2002	United Kingdom
Walking & Cycling: The Economic Benefits	n.d.	London, UK
National Sport and Recreation Plan	n.d.	South Africa
Auckland Sport and Recreation - Strategic Action 2014-2024	n.d.	Auckland, New Zealand

Making London the Most Active City in the World	n.d.	London, England
Active 2020: A Strategic Plan for Sport and Active Recreation in the ACT & Region 2011–2020	n.d.	Canberra, Australia
Greater Helsinki Vision 2050	n.d.	Helsinki, Finland
The City of San Diego Community Action Plan on Homelessness	n.d.	San Diego, CA, USA
Ola Oahu Resilience Strategy	n.d.	Oahu Island, HI, USA
Building Better Cities with Young Children and Families	n.d.	Global
Physical Activity Policies at Municipal Level in Europe - Analysis of the Passport Survey	n.d.	Europe
City of Copenhagen Culture and Leisure Policy 2020-23	n.d.	Copenhagen, Denmark
Local Journeys Strategy	n.d.	Liverpool, UK

APPENDIX-3: NATIONAL BENCHMARKS

Report Title	Year	Jurisdiction
Canadian Women & Sport - The Rally Report	2020	National
Walk Wheel Windsor: Active Transportation Master Plan	2019	Windsor, ON
Benchmarking the State of Cycling in Metro Vancouver	2019	Vancouver, BC
Active Transportation Plan	2019	Thunder Bay, ON
Let's Connect - Active Transportation Master Plan	2019	Brampton, ON
Richmond Community Wellness Strategy	2018	Richmond, BC
Sport for Life - Strategic Plan 2018: Create. Share. Mobilize.	2018	National
Moving Saanich Forward: Active Transportation Plan	2018	Saanich, BC
Active Aging Plan	2017	Burlington, ON
Richmond's Participation in the Active Wellbeing Initiative	2017	Richmond, BC
Active Recreation, and Sport in Edmonton 2016-2026	2016	Edmonton, AB
Active Transportation Plan	2016	Saskatoon, SK
Active Transportation Plan - Final Report	2016	Saskatoon, SK
Live Active: A Collaborative Strategy for Active Living, Active Recreation, and Sport in Edmonton 2016-2026	2016	Edmonton, AB
A Healthy City for All: Healthy City Strategy - Four Year Action Plan 2015 - 2018 Phase 2	2015	Vancouver, BC
Pathways to Wellbeing	2015	National
Active City: Designing for Health	2014	Toronto, ON
Designing for Health: 10 Principles for an Active City	2014	Toronto, ON
City of Mississauga Sports Plan	2013	Mississauga, ON
Mobility Playbook 2030	2013	Red Deer, AB
City of Toronto Sport Plan	n.d.	Toronto, ON
Game ON - The Ontario Government's Sport Plan	n.d.	Ontario

APPENDIX-4: REGIONAL PLANS AND REPORTS

Report Title	Year	Author
Support for MDP	2020	N/A
One Calgary: Service Plans & Budgets 2019-2022	2019	City of Calgary
Next 20: Making Life - Better for Calgarians	2019	City of Calgary
Next 20: Municipal Development Plan & Calgary Transportation Plan Review	2019	City of Calgary
Next 20: Municipal Development Plan & Calgary Transportation Plan Review	2019	City of Calgary
2019 Civic Census Results	2019	City of Calgary
Review of MDP and CTP – Slideshow	2019	City of Calgary
Resilient Calgary Strategy	2019	City of Calgary
Calgary Arts Development: 2019 – 2022 Strategic Framework	2019	CADA
Town of Canmore Strategic Plan: 2019 – 2022	2019	Town of Canmore
One Calgary: Service Plans & Budgets 2019-2022	2019	City of Calgary
One Calgary: 2020 Full Budget	2018	City of Calgary
Service Value Dimensions: Business Perspectives Research Report	2018	City of Calgary
Climate Resilience Strategy	2018	City of Calgary
Municipal Development Plan	2018	City of Calgary
The Economic Significance of Amateur Sport in Calgary in 2016	2018	Caminata Consulting
Sport Calgary Strategic Plan	2018	Sport Calgary
Calgary in the New Economy	2018	Calgary Economic Development
Service Plans and Budgets 2019-2022: What We Heard	2018	City of Calgary
2018-2020 Strategic Plan	2018	Tourism Calgary
2019-2022 Service Plans & Budgets - Stakeholder Report Back: What We Heard	2018	City of Calgary
One Calgary: 2019-2022 Service Plans and Budgets - Regular Meeting of Council	2018	City of Calgary
One Calgary: 2020 Full Budget	2018	City of Calgary
Service Value Dimensions: Business Perspectives Research Report	2018	City of Calgary
Climate Resilience Strategy	2018	City of Calgary
The City of Calgary Civic Sport Policy Review	2017	WMC
Rivers District Master Plan	2017	CMLC
Ultimate hosts. Ultimate host city	2017	Tourism Calgary
The City of Calgary Civic Sport Policy Review	2017	WMC
Step Forward: A strategic plan for improving walking in Calgary	2016	City of Calgary
Sport Field Strategy - Research Summary Report	2016	City of Calgary
Sport Field Strategy	2016	City of Calgary
Sport Field Strategy - What We Heard	2016	City of Calgary
STEP FORWARD: A strategic plan for improving walking in Calgary	2016	City of Calgary
Town of Canmore Strategic Plan: 2015 – 2020	2015	Canmore Business and Tourism
Calgary Arts Development Strategic Plan: 2015–2018	2015	CADA
Investing in Mobility: 2015-2024 Transportation Infrastructure Investment Plan	2015	City of Calgary
Action Plan Summary	2015	City of Calgary
Action Plan 2015-2018	2015	City of Calgary
Imagine Parks	2014	Calgary Parks

New Recreation Facilities Sport User Groups – Feedback 2012 – 2014	2014	City of Calgary
2020 Sustainability Direction: Annual Report (2014)	2014	City of Calgary
The City of Calgary: Bicycle Program - 2013 Yearbook	2013	City of Calgary
Calgary 2020: The City of Calgary’s 10-year plan towards ImagineCALGARY	2012	City of Calgary
The City of Calgary Recreation Facilities: Functional Program and Concept Design Report	2012	City of Calgary and GEC
Cycling Strategy	2011	City of Calgary
Calgary Community GHG Reduction Plan	2011	City of Calgary
Triple Bottom Line Policy Framework - 2011 Update	2011	City of Calgary
Recreation Master Plan 2010-2020	2010	City of Calgary
Recreation Amenities Gap Analysis	2010	HarGroup Management Consultants, Inc.
Centre City Mobility Plan	2010	City of Calgary
Calgary Transportation Plan	2009	City of Calgary
Calgary Transportation Plan	2009	City of Calgary
Team Spirit: Advancing Amateur Sport for all Calgarians	2008	Calgary Sport Council
Plan It Calgary	2007	City of Calgary
Imagine Calgary: Calgary’s Plan for Long Range Urban Sustainability	2006	ImagineCALGARY
Imagine Calgary: Calgary’s Plan for Long Range Urban Sustainability	2006	ImagineCALGARY
Open Space Plan	2003	Calgary Parks
Centre City Parks: Open Space Management Plan	[TBC]	City of Calgary
5A Network Guiding Principles: Always Available for All Ages & Abilities	[TBC]	City of Calgary
Bicycle Program: Making Calgary a bicycle-friendly city	[TBC]	City of Calgary
Synopsis of the Program, Amenity and Market Assessment Study	[TBC]	HarGroup Management Consultants, Inc.

APPENDIX-5: PLAYBOOK 2030 CHAMPIONS

Champion	Title	Organization
Carson Ackroyd	Senior Vice President of Sales	Tourism Calgary
Lois Appleby	Chief Executive Officer, 2000 Sydney Paralympic Games	Sydney Paralympic Organising Committee
Cherl Bradish	Founder & Managing Director	Future of Sport Lab (FSL) & Ryerson University
Sarah Brown	Assistant Professor	Mount Royal University
Dawn Burke	Business and Policy Planner, Calgary Parks & Strategic Services	City of Calgary
Dale Calkins	Senior Policy & Planning Advisor	Druh Farrell – Calgary Ward 7 Councillor
Andrea Carey	Founder & Chief Inclusion Officer	Inclusion Incorporated
Sean Carter	Founder & Owner	BikeBike
Heather Cowie	General Manager, Community & Protective Services	City of Fort Saskatchewan
Louise de Lannoy	Project Manager	Outdoor Play Canada
Jon Diment	Manager of League Operations	Calgary Sport & Social Club
Gary Ellis	Chief Experience Officer	BridgeTownWorks
Rob Gillespie	Club Director	Calgary Sport & Social Club
Marc Iturriaga	Founder & Belonging Consultant	Bonobo
Katherine Koplovich	Economist, Research & Strategy	Calgary Economic Development
Nancy Lynch	Founder & Owner	Aletha Sport
Peter McCrory	Director, Olympic Oval	University of Calgary
Rod McKay	Chair, Calgary Sports & Major Events Committee	Tourism Calgary
Allison Sandmeyer-Graves	Chief Executive Officer	Canadian Women & Sport
Bill Stamile	Programming and Communications Officer	Calgary Padel Club
Julie Stevens	Special Advisor to the President, Canada Games	Brock University
Tyler White	Chief Executive Officer	Siksika Health Services
Lea Wiens	Executive Director	Sport 4 Life Cochrane

APPENDIX-6: ACTIVE ECONOMY BY NAICS

Intensity	Definition	Example NAICS Code
100 per cent	Estimated that 100 per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors the AE.	<p>Sport</p> <ul style="list-style-type: none"> 611620 - Athletic instruction 711213 - Horse racetracks 711214 - Other racing facilities and related activities 711215 - Independent athletes performing before a paying audience 711217 - Sports teams and clubs performing before a paying audience 711319 - Sports stadiums and other presenters with facilities 713910 - Golf courses and country clubs 713920 - Skiing facilities 713940 - Fitness and recreational sports centres 713950 - Bowling centres 713991 - Sports clubs, teams and leagues performing before a non-paying audience 713992 - Other sport facilities <p>Active Recreation</p> <ul style="list-style-type: none"> 114114 - Freshwater fishing 114210 - Hunting and trapping 721211 (Recreational) vehicle (RV) parks and campgrounds 721212 - Hunting and fishing camps 721213 (Recreational) (except hunting and fishing) and vacation camps 711120 - Dance companies 713930 - Marinas 721211 (Recreational) vehicle (RV) parks and campgrounds 721212 - Hunting and fishing camps 721213 (Recreational) (except hunting and fishing) and vacation camps 712190 - Nature parks and other similar institutions in <p>Other</p> <ul style="list-style-type: none"> 711412 - Sports agents and managers 339920 - Sporting and athletic goods manufacturing 414470 - Amusement and sporting goods merchant wholesalers 451111 - Golf equipment and supplies specialty stores 451112 - Ski equipment and supplies specialty stores 451113 - Cycling equipment and supplies specialty stores 451119 - All other sporting goods stores 444220 - Nursery stores and garden centres
30 per cent	Estimated that 30 per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors the AE.	<p>Education</p> <ul style="list-style-type: none"> 611110 - Elementary and secondary schools 611610 - Fine arts schools 611690 - All other schools and instruction 532280 - All other consumer goods rental <p>Media & Content</p> <ul style="list-style-type: none"> 541810 - Advertising agencies 541820 - Public relations services 541830 - Media buying agencies 541840 - Media representatives 541850 - Display advertising 541860 - Direct mail advertising 541899 - All other services related to advertising 541910 - Marketing research and public opinion polling 541920 - Photographic services 561590 - Other travel arrangement and reservation services (Active Tourism) 515110 - Radio broadcasting 515120 - Television broadcasting 515210 - Pay and specialty television 519110 - News syndicates 519130 - Internet broadcasting and web search portals <p>Health & Wellness</p>

		446191 - Food (health) supplement stores 621340 Offices of physical, occupational, and speech therapists and audiologists Other 813990 - Other membership organizations (use exact count where possible) 813410 - Civic and social organizations (use exact count where possible) 713999 - All other amusement and recreation industries
10 per cent	Estimated that ten per cent of the activity of an enterprise in this category are within the scope of one or more of the eleven sectors the AE.	Products & Gear 414110 - Clothing and Clothing Accessories Wholesaler-Distributors 448199 - All other clothing stores 448210 - Shoe stores Health & Wellness 621510 Medical and diagnostic laboratories 621390 Offices of all other health practitioners Sport Betting 713299 - All other gambling industries 721120 - Casino hotels 532120 - Truck, utility trailer and recreational vehicle (RV) rental and leasing Other 415190 (Recreational) and other motor vehicles merchant wholesalers
One per cent	Sector provides enabling support services to one or more of the eleven sectors of the AE. The minimum default is one per cent of the activity is allocated to the AE.	Professional Services 541110 - Offices of lawyers 541212 - Offices of accountants 541213 - Tax preparation services 541215 - Bookkeeping, payroll, and related services 541310 - Architectural services 541320 - Landscape architectural services 541330 - Engineering services 541340 - Drafting services 541420 - Industrial design services 541430 - Graphic design services 541490 - Other specialized design services 541612 - Human resources consulting services 541619 - Other management consulting services 541690 - Other scientific and technical consulting services 541710 - Research and development in the physical, engineering and life sciences 812190 - Other personal care services 323119 - Other Printing 419120 - Wholesale trade agents and brokers 453310 - Used merchandise stores 446199 All other health and personal care stores Health & Wellness 621110 Offices of physicians 621330 Offices of mental health practitioners (except physicians) 621420 Out-patient mental health and substance abuse centres 621494 Community health centres 621499 All other out-patient care centres Other 237990 - Other Heavy and Civil Engineering Construction

APPENDIX-7: ACTIVE ECONOMY POSTSECONDARY PROGRAMS

School & Program

Mount Royal University

Bachelor of Business Administration
Bachelor of Communication - Broadcast Media Studies
Bachelor of Communication - Journalism
Bachelor of Communication - Public Relations
Bachelor of Health and Physical Education - Athletic Therapy
Bachelor of Health and Physical Education - Ecotourism and Outdoor Leadership
Bachelor of Health and Physical Education - Physical Literacy
Bachelor of Health and Physical Education - Sport and Recreation Management

University of Calgary

Bachelor of Commerce
Masters/ PhD Commerce/ Business
Bachelor of Communications
Masters/ PhD Communications
Bachelor of Community Rehabilitation
Bachelor of Kinesiology
Bachelor of Kinesiology - Biomechanics
Bachelor of Kinesiology - Exercise and Health Physiology
Bachelor of Kinesiology - Mind Science
Master/ PhD of Kinesiology
Master/ PhD of Architecture
Master of Landscape Architecture
Master of Environmental Design
Master of Planning
Doctor of Design

SAIT

Bachelor of Business Administration
Bachelor of Hospitality and Tourism Management
Diploma in Hospitality Management
Diploma in Travel and Tourism
Diploma in Radio, Television and Broadcast News

Bow Valley College

Business Administration (Diploma and Certificate)
Event Management Certificate
Recreation Aide Therapy Certificate
Nutrition Manager Certificate

Others

Ambrose University (Bachelor of Business Administration)

APPENDIX-8: REGIONAL ACTIVE ECONOMY STRUCTURAL CAPITAL EXAMPLES

Intra-Group Structural Capital	Inter-Group Structural Capital
Alberta P Association	<i>ActiveCITY</i> Collective
Bike Calgary	Airdrie Municipal Planning Commission
Calgary & District Amateur Softball Association/ Softball Calgary	Banff Municipal Planning Commission
Calgary 55 Plus Games Association	Calgary Board of Education
Calgary Bantam Football Association	Calgary Catholic School District
Calgary Basketball Officials Association	Calgary Metropolitan Region Board
Calgary Beach Volleyball Association	Calgary Multisport Fieldhouse Society
Calgary City Council's Planning and Urban Development Committee	Calgary River Users' Alliance
Calgary Girls Rodeo Association	Calgary Sports & Major Events Committee
Calgary Minor Basketball Association	Canmore Community Events Committee
Calgary Minor Soccer Association	Canmore Planning Commission
Calgary Minor Softball Association	Cochrane Parks & Recreation Committee
Calgary Police Rodeo Association	Cochrane Planning Commission
Calgary Roller Derby Association	Foothills Athletic Park Redevelopment Advisory Committee
Calgary Rugby Union	Foothills-Okotoks Recreation Society
Calgary Senior High School Athletic Association	Lindsay Park Sports Society
Calgary Sledge Hockey Association	McMahon Stadium Society
Calgary Speed Skating Association	Okotoks Municipal Planning Commission
Calgary Spring Football Association	Parks Foundation Calgary
Calgary Ultimate Association	Saddledome Foundation
Calgary United Soccer Association	Social Wellbeing Advisory Committee
CALTAF Athletic Association	Sport Calgary
Canadian Association for Disabled Skiing (CADS) – Calgary	Tourism Calgary
Canadian Sport Institute Calgary	
Combative Sports Commission	
Federation of Calgary Communities	
Football Hockey Link Society	
Hockey Calgary	
Little League Alberta District 8 - Stampede City	
Pathways and Bikeways Project Steering Committee	
Ringette Calgary	
Spectrum Volleyball Calgary Society	
Superleagues Ball Hockey	
Swim Alberta	
The Calgary Football Officials Association	
Urban Design Review Panel	

APPENDIX-9: BUILT RESOURCE AUDIT³²⁸

Active Asset	# Total	Per 100,000	Primary Infrastructure
Aquatic Centres	4	0.31	Public
Arenas	22	1.69	Public
Ice Sheets	64	4.92	Public
Athletic Parks	14	1.08	Public
Badminton Courts	39	3.00	Public
Baseball Diamonds	769	59.15	Public
Basketball Courts (Outdoor)	88	6.77	Public
Bowling Facilities (indoor)	7	0.54	Private
Boxing Gyms	16	1.23	Private
Built Lakes	2	0.15	Public
Chiropractic Clinics	148	11.38	Private
Climbing Recreation Facility	6	0.46	Private
Community Association Facilities	208	16.00	Public
Community Gardens	169	13.00	Public
Cricket Pitches	10	0.77	Public
CrossFit Gyms	11	0.85	Private
Cultural Centres	7	0.54	Public
Curling Rinks	10	0.77	Private
Curling Sheets	92	7.08	Private
Cycle Tracks	5	0.38	Public
Dance Studios	26	2.00	Private
Disk Golf Courses	3	0.23	Public
Equestrian Centres	32	2.46	Private/ Public
Fitness Centres	64	4.92	Private/ Public
Fitness Studios	241	18.54	Private/ Public
Football Fields	29	2.23	Private
Golf & Curling Club	2	0.15	Public
Golf Course	48	3.69	Private/Public
Golf Holes	954	73.38	Private/ Public
Gymnastic Facilities	10	0.77	Private
Ice Sheet (outdoor)	140	10.77	Public
Kickboxing Gym	15	1.15	Private
Lacrosse	2	0.15	Public
Laser Tag	4	0.31	Private
Lawn Bowling	5	0.38	Public
Martial Art Studios	55	4.23	Private
Multisport Fields	846	65.08	Public
Off Leash Dog Areas	157	12.08	Public
Paintball Courses	3	0.23	Private
Park and Green Space	2733	210.23	Public
Pathways (paved)	1000KM	76.92	Public
Physiotherapy Clinics	133	10.23	Private
Playgrounds (outdoors)	1619	124.54	Public
Playgrounds (indoors)	12	0.92	Public
Pools (indoor)	151	11.62	Public
Pools (outdoor)	8	0.62	Public
Recreation Facility (multisport)	40	3.08	Public
Multi-Purpose Gym	49	3.77	Private/ Public
Multi-Purpose Room	260	20.00	Private/ Public
Multi-Purpose Studio	11	0.85	Private/ Public
Recreation Facility (youth & seniors)	23	1.77	Public
Running Track (outdoor)	9	0.69	Public
Running Track (indoor)	16	1.23	Public
Racetracks	9	0.69	Public
Roller Derby / Roller Skating	3	0.23	Private
Rowing Facilities	1	0.08	Private

School Gyms (Private)	17	1.31	Private
School Gyms (Public)	246	18.92	Public
Shooting / Throwing	11	0.85	Private
Skate Park (outdoor)	15	1.15	Public
Ski (Nordic)	1	0.08	Public
Ski Resorts (downhill)	4	0.31	Private/ Public
Ski Runs (downhill)	369	28.38	Private/ Public
Squash/ Racquetball (courts)	84	6.46	Private/ Public
Terrain Park (downhill)	4	0.31	Private/ Public
Soccer Pitch (outdoor)	800	61.54	Public
Soccer Centres (indoor)	9	0.69	Private
Splash Pads	6	0.46	Public
Sportsplex	6	0.46	Public
Squash/Racquetball Facilities	4	0.31	Private/ Public
Tennis Courts (indoor)	31	2.38	Private
Tennis Courts (outdoor)	291	22.38	Public/ Private
Toboggan Hills	22	1.69	Public
Track and Field	9	0.69	Public

APPENDIX-10: ORGANIZED SPORTS AND ACTIVE RECREATION PARTICIPATION³²⁹

Activity	# Organizations	Hours Programming
Multisport (Large)	15	10,599,345
Multisport (Small and Medium)	21	4,946,361
Soccer (Minor)	1	1,467,656
Personal Training & Fitness Centre	137	1,310,063
Martial Arts	76	1,292,000
Yoga and/or Spin Studio	65	1,258,400
Hockey (Minor)	1	996,436
Gymnastics (Competitive)	9	633,078
Baseball	6	493,402
Canoe/ Kayak - Rowing	7	451,080
Gymnastics (Recreational)	10	396,000
Soccer (Adult)	4	367,106
Dance	36	332,640
Skating (Private Programming)	2	318,622
Hockey (Adult) Recreation	10	314,624
Swimming (City of Calgary)	1	309,474
Swimming (High Performance)	7	293,965
Basketball (Minor)	1	282,618
Swimming (Lessons)	7	250,782
CrossFit	18	198,000
Kickbox Fitness	15	198,000
Softball - Slo-Pitch (CSSC)	1	167,760
Day Camps (City of Calgary)	1	165,761
Swimming - Synchro	5	156,925
Boxing	16	154,880
Track and Field + X-Country (High School)	1	124,523
Lacrosse (Minor)	1	88,072
Ringette	1	83,040
Softball (Recreational)	15	78,975
Baton	8	76,200
Volleyball	8	72,784
Water Polo	5	62,280
Football (Minor)	3	60,500
Combat (Recreational)	12	60,000
Skiing	9	59,607
Curling (Recreational)	10	55,910
Lacrosse (Junior)	1	55,500
Fitness and Strength (City of Calgary)	1	48,033
Football (High School)	1	44,880
Badminton	2	43,200
Volleyball - Indoor (CSSC)	1	42,336
Biathlon	1	41,250
Softball (Minor)	1	39,520
Curling (Lessons)	10	38,400
Cheer	3	37,800
Cricket	1	34,944
Running	7	33,320
Field Hockey (Leagues)	2	32,703
Snowboarding	9	31,590
Rugby	13	28,357
Track and Field (Competitive)	1	26,920
Sports (City of Calgary)	1	26,480
Arts - Dance & Performing (City of Calgary)	1	25,291
Soccer - Outdoor (CSSC)	1	24,288

Rugby (High School)	1	23,400
Soccer (High School)	1	22,780
Diving	1	21,800
Basketball (CSSC)	1	21,000
Skating and Hockey Programming (City of Calgary)	1	20,439
Sailing (City of Calgary)	1	20,321
Ball Hockey	1	18,960
Sailing	1	17,722
Climbing	7	16,800
Soccer - Turf (CSSC)	1	16,704
Volleyball - Beach (CSSC)	1	15,552
Hockey - Floor (CSSC)	1	15,192
Golf (City of Calgary)	1	14,554
Field Hockey (Minor)	7	13,816
Basketball (High School)	1	11,700
Dodgeball	3	11,500
Martial Arts (City of Calgary)	1	10,402
Scuba Diving	2	10,032
Basketball (Recreational)	2	9,970
Mountain Biking	4	9,648
Roller Derby	2	9,297
Football - Flag (Adult)	2	8,680
Handball	1	8,400
Football - Flag (Youth)	5	8,356
Ultimate Frisbee (CSSC)	1	7,920
Yoga, Pilates & Wellness (City of Calgary)	1	7,828
Sledge Hockey	2	6,870
Dodgeball (CSSC)	1	6,408
Parkour	1	5,400
Pre/Postnatal Fitness (City of Calgary)	1	4,930
Field Hockey (High School)	1	4,884
Hockey - USports	2	4,480
Netball	1	4,400
Multi-Sport (CSSC)	1	4,176
Kickball (CSSC)	1	4,080
Curling (CSSC)	1	3,888
Football - Flag (CSSC)	1	3,420
Badminton (CSSC)	1	3,168
Quidditch	1	2,712
Ultimate Frisbee	1	2,560
Soccer - Futsal (CSSC)	1	2,280
Pickleball (CSSC)	1	1,680
Squash (CSSC)	1	1,536
Tennis (CSSC)	1	1,056
Spikeball (CSSC)	1	960
Volleyball - Grass (CSSC)	1	432
Soccer - Gym (CSSC)	1	420
Skateboarding (City of Calgary)	1	298
Wallyball (CSSC)	1	216
Estimated Total	677	29,274,708

APPENDIX-11: NAICS BY SECTOR

NAICS Codes by Sector	# Orgs.	Sample Enterprises
Organized Sports		
711319 - Sports stadiums and other presenters with facilities	13	Flames Community Arena
611620 - Athletic instruction	419	Todd Halpen Golf Performance Springbank Equestrian Centre
711213 - Horse racetracks	7	Century Downs Racetrack and Casino
711214 - Other racing facilities and related activities	10	Calgary Sports Car Club
711215 - Independent athletes performing before a paying audience	21	Connor Hamilton
711217 - Sports teams and clubs performing before a paying audience	8	Calgary Hitmen Calgary Roughnecks
713910 - Golf courses and country clubs	35	Bearspaw Golf Club
713920 - Skiing facilities	5	Sunshine Village Ski Resort WinSport
713950 - Bowling centres	13	Bowling at Century
713991 - Sports clubs, teams and leagues performing before a non-paying audience	104	Mount Pleasant Tennis Club
713992 - Other sport facilities	23	Calgary Curling Club
611110 - Elementary and secondary schools	36	Notre Dame High School
813410 - Civic and social organizations	208	West Hillhurst Community Association
813990 - Other membership organizations	497	Calgary Combative Sport Commission (CCSC)
Active Recreation		
114114 - Freshwater fishing	0	
114210 - Hunting and trapping	9	Airdrie Hunting and Fishing Association Calgary Fish and Game Association
711120 - Dance companies	58	Decidedly Dance Absolute Dance Studio
712190 - Nature parks and other similar institutions	6	North Glenmore Park Sandy Beach Park
713930 - Marinas	4	Ghost Lake Marina
713940 - Fitness and recreational sports centres	384	Action CrossFit Anytime Fitness- Cochrane Orangetheory- Seton Goodlife Fitness- Okotoks Vivo for Healthier Generations
721211 (Recreational) vehicle (RV) parks and campgrounds	24	Balzac Campground RV Park & Storage Calaway Park Campground
721212 - Hunting and fishing camps	10	Alberta Bush Adventures
721213 (Recreational) (except hunting and fishing) and vacation camps	19	Camp Chief Hector
611610 - Fine arts schools	65	Alberta Ballet School
611690 - All other schools and instruction	201	Auburn Bay School Balmoral School
713999 - All other amusement and recreation industries	20	The Shooting Edge
415190 (Recreational) and other motor vehicles merchant wholesalers	2	
532120 - Truck, utility trailer and recreational vehicle (RV) rental and leasing	7	Alberta Bush Adventures
Active Living		
451113 - Cycling equipment and supplies specialty stores		
444220 - Nursery stores and garden centres		
Health & Wellness		
621310 - Offices of chiropractors	363	Action Chiropractic & Sport Therapy Bow Valley Chiropractic
446191 - Food (health) supplement stores	39	Vitamins First GNC
621340 - Offices of physical, occupational, and speech therapists and audiologists	156	Brentwood Physiotherapy Clinic Caleo Health Physiotherapy
621390 - Offices of all other health practitioners	124	Coepitive Edge Sport Therapy Action Sports Clinic
621510 - Medical and diagnostic laboratories	18	Alberta Precision Laboratories EFW Radiology
621110 - Offices of physicians	40	Walk Well Clinic of Calgary
621330 - Offices of mental health practitioners (except physicians)	4	Alberta Sports Development Centre- Calgary Region

621420 - Out-patient mental health and substance abuse centres	0	Dr. Natasha Kutlesa
621494 - Community health centres	0	
621499 - All other out-patient care centres	2	Centre for Sleep and Human Performance
Active Equipment & Accessories		
444220 - Nursery stores and garden centres	29	Blue Grass Ltd Country Gardens & Nursery
339920 - Sporting and athletic goods manufacturing	23	Fiberbuilt Manufacturing
414470 - Amusement and sporting goods merchant wholesalers	33	Henry Sports Group
451111 - Golf equipment and supplies specialty stores	12	Erickson's Custom Clubs Golf Town
451112 - Ski equipment and supplies specialty stores	15	Ski Cellar Snowboard Ski West
451113 - Cycling equipment and supplies specialty stores	22	Calgary Cycle Ridley's Cycle
451119 - All other sporting goods stores	142	Adrenalin Source For Sport AQ Outdoors Fitness Depot Sport Chek
532280 - All other consumer goods rental	22	All Season Rental Adventures Lazy Day Raft Rental Norseman Outdoor Specialist
419120 - Wholesale trade agents and brokers	4	
453310 - Used merchandise stores	1	2nd Chance Sports
Active Products & Gear		
414110 - Clothing and clothing accessories merchant wholesalers	9	CAMP Brand
448199 - All other clothing stores	13	
448210 - Shoe stores	10	Foot Locker Gord's Running Store Strides Running Store
Tourism		
721111 - Hotels	44	Calgary Marriott Downtown Airport Travelers Inn & Suites
721113 - Resorts	10	Azuridge Estate Hotel Pomeroy Kananaskis Mountain Lodge
721198 - All other traveler accommodation	8	Centre for Sleep and Human Performance
Active Design & Infrastructure		
237990 - Other heavy and civil engineering construction	1	TOMKO Sport Services
541310 - Architectural services	4	Dialog Design GEC Architecture
Media & Content		
515110 - Radio broadcasting	10	FAN 960
515120 - Television broadcasting	7	CTV
515210 - Pay and specialty television	2	Sportsnet West
519110 - News syndicates	2	Global News
519130 - Internet broadcasting and web search portals	32	Impact Magazine
541810 - Advertising agencies	81	Communo
541820 - Public relations services	43	Edelman
541830 - Media buying agencies	2	
541840 - Media representatives	15	
541850 - Display advertising	20	Pattison Outdoor
541860 - Direct mail advertising	2	
541899 - All other services related to advertising	65	
541910 - Marketing research and public opinion polling	31	Stone-Olafson
541920 - Photographic services	144	Gameface Team Sports Photography
561590 - Other travel arrangement and reservation services	16	FreeBird Adventures
Active Professional Services		
711412 - Sports agents and managers	21	Manifesto Sport Management P4 Sports Agency RSG Hockey Jenny Craig Weight Loss Centre
812190 - Other personal care services	6	
323119 - Other printing	1	
446199 - All other health and personal care stores	2	
541420 - Industrial design services	2	
541430 - Graphic design services	4	
541490 - Other specialized design services	1	
541110 - Offices of lawyers	22	Cassels Entertainment and sports law
541212 - Offices of accountants	20	
541213 - Tax preparation services	3	
541215 - Bookkeeping, payroll, and related services	10	

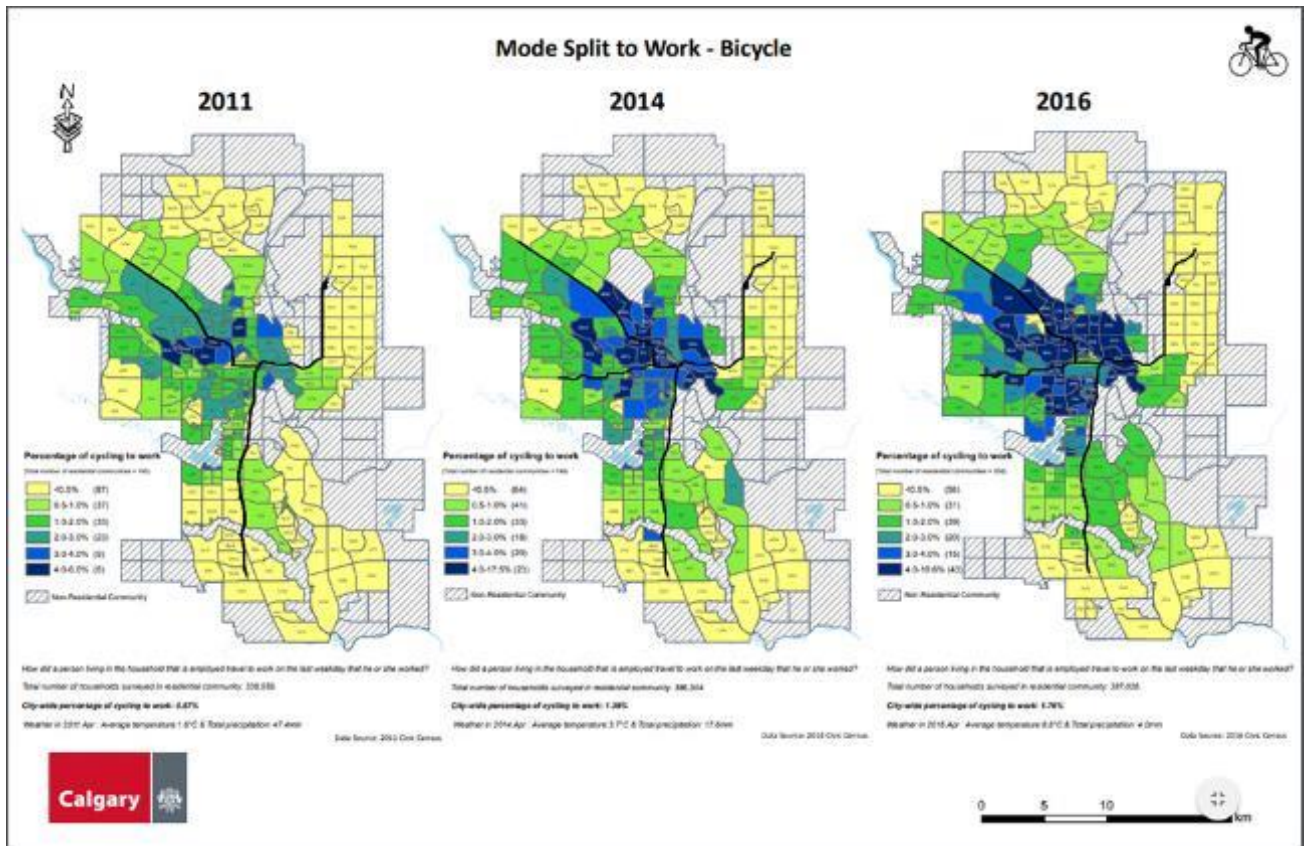
541320 - Landscape architectural services	1	Ground Cubed
541330 - Engineering services	62	ISL Engineering
541340 - Drafting services	7	Sanford Design Group Ltd.
541612 - Human resources consulting services	4	Jenny Craig Weight Loss Centre
541619 - Other management consulting services	22	
541690 - Other scientific and technical consulting services	28	
541710 - Research and development in the physical, engineering and life sciences	2	
Sport Betting		
713299 - All other gambling industries	2	Century Downs Racetrack and Casino
721120 - Casino hotels	2	Grey Eagle Resort

APPENDIX-12: STRATEGIC ANCHOR ANALYSIS

Anchor Plans ³³⁰	Pillars ³³¹
Calgary Plans	
Imagine Calgary - Calgary's Plan For Long Range Urban Sustainability (2006)	<ol style="list-style-type: none"> 1. We are each connected to one another. Our diverse skills and heritage interweave to create a resilient communal fabric, while our collective spirit generates opportunity, prosperity, and choice for us all. 2. We are each connected to our places. We treasure and protect our natural environment. 3. We are each connected to the communities. Whether social, cultural, or physical, these communities are mixed, safe, and just. They welcome meaningful participation from everyone, and people move freely between them. 4. We are each connected beyond our boundaries. We understand our impacts upon and responsibilities to others.
Municipal Development Plan (2018)	<ol style="list-style-type: none"> 1. A prosperous economy 2. Shaping a more compact urban form 3. Creating great communities 4. Urban design 5. Connecting the city 6. Greening the city
One Calgary (2019)	<ol style="list-style-type: none"> 1. A prosperous city 2. A city of safe & inspiring neighbourhoods 3. A city that moves 4. A healthy & green city 5. A well-run city
Calgary Economic Development (2018)	<ol style="list-style-type: none"> 1. Canada's destination for talent 2. Canada's leading business-to-business innovation community 3. Canada's most livable city 4. Canada's most business-friendly city
Transportation Plan (2014)	<ol style="list-style-type: none"> 1. Align with city and regional land use directions 2. Promote safety 3. Provide affordable mobility and universal access 4. Enable transit, walking and cycling as preferred choices 5. Promote economic development by efficient movement of workers and goods 6. Advance environmental sustainability 7. Ensure transportation infrastructure is well managed.
RouteAhead – Calgary Transit (2012)	<ol style="list-style-type: none"> 1. Make it easy to use 2. Safe, accessible, clean, convenient, comfortable, and reliable. 3. Address barriers to use for non-users. 4. Match transit to land use. 5. Focus investment on increasing ridership. 6. Evolve from radial network to connective grid. 7. Meet near-term revenue/cost ratio (50/50 to 55/45). 8. Meet capital funding objectives of investing in Mobility. 9. Take care of and optimize use of what we own.
Climate Resilience Strategy (2018)	<ol style="list-style-type: none"> 1. Play active role in climate innovation 2. Be inclusive in planning and implementation 3. Integrate both mitigation and adaptation 4. Introduce locally relevant solutions 5. Committed to governance, funding, and partnerships.
Triple Bottom Line Policy (2011)	<ol style="list-style-type: none"> 1. To advance the vision to "create and sustain a vibrant, healthy, safe and caring community". 2. To embed the principle of a triple bottom line, incorporating economic, social, and environmental measures, across an estimated 350 City of Calgary policies. 3. To position Calgary in a global sustainability context.
Recreation Master Plan (2010-20)	<ol style="list-style-type: none"> 1. Developing physical, creative, and cultural/ social literacy 2. Foster vibrancy 3. Building individual and community capacity 4. Creating, supportive, inclusive environment
Imagine Parks (2015)	<ol style="list-style-type: none"> 1. Be accountable and responsive 2. Make people a priority 3. Be adaptable and resilient 4. Conserve biodiversity and the natural environment

The Always Available for All Ages & Abilities (5A) Network	<ol style="list-style-type: none"> 1. Separate people by their speed 2. Improve visibility 3. Make it reliable 4. Be accessible for everyone 5. Make it easy to use
Sport for Life Policy (2018)	<ol style="list-style-type: none"> 1. Design and deliver introduction to sport and recreational sport programs and initiatives that: <ol style="list-style-type: none"> a. Equitable, inclusive, and accessible; and b. Align with the long-term athlete development stages of awareness, first involvement, active start, fundamentals, learn to train and active for life. 2. Provide quality sport experiences. 3. Activate open spaces, in support of Calgary's Play Charter. 4. Remove barriers that prevent underrepresented groups from participating and enjoying sport. 5. Facilitate connections between sport and education 6. Enable the health, wellbeing, and active lifestyles of all Calgarians when developing, amending, maintaining, and reviewing municipal plans, policies, and bylaws
Step Forward: A Strategic Plan for Improving Walking in Calgary (2016)	<ol style="list-style-type: none"> 1. Create direct, simple connections to nearby destinations. 2. Create well-designed, interesting spaces to walk in. 3. Consider scale and make sure spaces, street blocks, etc. are the right size for people to use (not too big or too small). 4. Start with people and where they want to walk and put parking, loading and storage out of people's way. 5. Manage conflict between users rather than blocking off pedestrians. 6. Match feelings of safety to actual safety.
Affiliated Plans	
Tourism Calgary	<ol style="list-style-type: none"> 1. Enhanced hosting infrastructure 2. An emotionally compelling brand 3. Calgarians are engaged 4. Stakeholders work collaboratively 5. Strong year-round events calendar
Calgary Arts Development	<ol style="list-style-type: none"> 1. Continues its leadership role in the arts and with other stakeholders to make the arts integral to the lives of Calgarians. 2. Fosters collaborative relationships across sectors and communities to help ensure that Calgarians can experience art in their everyday lives. 3. Identify ways to increase and sustain our finances and expertise and use these resources wisely for greater impact.
Calgary Stampede	<ol style="list-style-type: none"> 1. Aligning with the community by engaging and listening 2. Connect with our neighbours through our brand promise 3. Supporting youth achievement in the community 4. Building infrastructure to deliver on our vision of preserving and promoting western heritage and values, now and for generations to come. 5. Building our team by facilitating increased collaboration across employees and volunteers.
Town of Canmore	<ol style="list-style-type: none"> 1. Safe mountain community with vibrant neighbourhoods and town centre 2. Livable, inclusive, and accessible 3. Diverse, adaptable, and future focused economy 4. Recognize and respect wildlife co-existence 5. Environmental sustainability 6. Connect people through an integrated transportation network

APPENDIX-13: INFLUENCE OF DISTANCE ON CYCLING



APPENDIX-14: CITY OF CALGARY ONE CALGARY PRIORITIES

The City of Calgary introduced a services-based budget for the 2020-22 budget cycle. In doing so, they broke their budget into five “citizen priority” areas.

Citizen Priority	Defined Scope	Systemic Link to Active Economy
A Prosperous City	Calgary continues to grow as a magnet for talent, a place where there is opportunity for all, and strives to be the best place in Canada to start and grow a business.	<p>Drive economic diversification</p> <p>Anchor talent acquisition & retention</p> <p>Leverage active tourism</p> <p>Leverage municipal infrastructure to maximize community ROI</p> <p>Anchor active economy in Winter City strategy</p> <p>Capacity building through a regional integrated experience economy strategy</p> <p>Ensure affordability and equality of access to active economy programming</p>
A City of Safe & Inspiring Neighbourhoods	Every Calgarian lives in a safe, mixed, and inclusive neighbourhood, and has the right and opportunity to participate in civic life. All neighbourhoods are desirable and have equitable public investments.	<p>Prioritizing urban design that promotes walkable and bikeable communities</p> <p>Investment in youth programming</p> <p>Recognize sport and active recreation is a leading delivery mechanism of sport and active recognition</p> <p>Ensuring strategy recognizes the changing face of Calgary and its implications on the active economy</p> <p>Recognizing active economy represents the largest volunteer sector in the city.</p>
A City that Moves	Calgary’s transportation network offers a variety of convenient, affordable, accessible, and efficient transportation choices. It supports the safe and quick movement of people and goods throughout the city, and provides services enabling Calgarians and businesses to benefit from connectivity within the city, throughout the region, and around the globe.	<p>Prioritizing of strategies that accelerate transition to modes of active transportation</p>
A Healthy & Green City	Calgary is a leader in caring about the health of the environment and promotes resilient neighbourhoods where residents connect with one another and can live active, healthy lifestyles.	<p>Role of active economy in reducing carbon and ecological footprint through prioritizing urban design principles that promote year-round walkable and bikeable communities.</p> <p>Leverage structured and unstructured sport and recreation opportunities to promote inclusivity and equality of access.</p> <p>Prioritize flexible open green spaces to enable diverse physical activity.</p> <p>Prioritizing strategies that promote year-round active transportation.</p> <p>Facilitate engagement across the entire active economy including commercial, social, and public enterprises.</p>
A Well-Run City	Calgary has a modern and efficient municipal government that is focused on resilience and continuous improvement to make life better every day for Calgarians by learning from citizens, partners, and others.	<p>Strategy focuses on eliminating City-level silos by emphasizing community value.</p> <p>Remove barriers to community engagement and ensure that city governance is representative of the diversity of the city.</p> <p>Ensure strong collaborative partners with First-Nation partners.</p>

APPENDIX-15: PHOTO REFERENCES

Introduction

- Konwitschny, N. (n.d.) *Nat Mountains.jpg*. [Digital Image]. P. 1
- Calgary Municipal Land Corporation. (n.d.) *EV Yoga*. [Digital Image]. P. 2
- Calgary and District Lacrosse Association. (n.d.) *CDLA – In Game Photo 2*. [Digital Image]. P. 10
- Claire, P. (2011). *Tourism- Fly Fishing 2011 Bow River*. [Digital Image]. P. 10
- Price, J. (n.d.). *COP_aerialCPic*. [Digital Image]. P. 10
- Price, J. (n.d.). *scottzman_hill_3*. [Digital Image]. P. 10
- Stuart, C. (n.d.). *102661678_2668380196780672_1098561194828415755_n*. [Digital Image]. P. 10

Executive Summary

- Calgary Municipal Land Corporation. (n.d.) *EV Pingpong*. [Digital Image]. P. 12
- Price, J. (n.d.). *Canada_Olympic_Park_Half_Pipe*. [Digital Image]. P. 16
- Price, J. (n.d.). *scottzman_hill_13*. [Digital Image]. P. 17
- Resorts of the Canadian Rockies Inc. (n.d.). *december-20th-2014_16065605765_o.jpg*. [Digital Image]. P. 17
- Amat, C. (2016). *Banff Gondola 2016 Summer*. [Digital Image]. P. 17
- Tourism Calgary. (n.d.). *pedalpub-social-media-27*. [Digital Image]. P. 17

Section 1

- Bolso, G. (n.d.). *IMG_4315*. [Digital Image]. P. 22
- Price, J. (n.d.). *IMG_0090*. [Digital Image]. P. 22
- Holland, D. (2015). *Scotiabank Calgary Marathon 2015 finish line*. [Digital Image]. P. 22
- Resorts of the Canadian Rockies Inc. (n.d.). *nakiska-january-11_8391894957_o*. [Digital Image]. P. 23
- Olympic Oval. (n.d.). *BCH_9423*. [Digital Image]. P. 24

Section 2

- Price, J. (n.d.). *A007_C015_0908PA.0000236*. [Digital Image]. P. 29
- Stuart, C. (n.d.). *116401076_164531515157514_106852196904182502_n*. [Digital Image]. P. 29
- Resorts of the Canadian Rockies Inc. (n.d.). *nakiska-ski-area_14936589184_o*. [Digital Image]. P. 29
- Hofer, K. (2014). *Kensington 2014 Street View*. [Digital Image]. P. 29

Section 3

- Price, J. (n.d.). *Brookfield-Winter-V_A1A4440*. [Digital Image]. P. 33
- Stuart, C. (n.d.). *117296364_116955016781891_3598124655056065496_n*. [Digital Image]. P. 33
- VIVO. (2019). *VIVO Playground 2019-309*. [Digital Image]. P. 33
- Gulotta, R. (2019). *IAKE IOUISE 2019 004*. [Digital Image]. P. 34
- Stuart, C. (n.d.). *118471121_747355679421960_8337221581854665355_n*. [Digital Image]. P. 37
- Resorts of the Canadian Rockies Inc. (n.d.). *nakiska-ski-area_15858283638_o*. [Digital Image]. P. 37
- McMorris, R. (2019). *Calgary Flames 2019 Fans*. [Digital Image]. P. 37
- Gibson, M. (2016). *Calgary River Surfing 2016 Kananaskis*. [Digital Image]. P. 37
- Winsport. (n.d.). *Winsport_Newcomer_Skiing-9101448*. [Digital Image]. P. 37

Section 4

- Calgary Municipal Land Corporation. (n.d.). *Brightside_PARK_StPatricksISland_332__*. [Digital Image]. P. 39
- Bain, A. (2018). *Calgary 2018 St Patrick's Island.jpg*. [Digital Image]. P. 55
- Price, J. (n.d.). *Brookfield-Winter-V_93A5333*. [Digital Image]. P. 58
- Price, J. (n.d.). *MK4_2043*. [Digital Image]. P. 58

Stuart, C. (n.d.). *106234844_323446815488126_6489629688157476253_n*. [Digital Image]. P. 58

VIVO. (2019). *VIVO Playground 2019-326*. [Digital Image]. P. 58

Winsport. (n.d.). *Winsport_AdaptiveProgram-7107527*. [Digital Image]. P. 58

Section 5

Olympic Oval. (2017). *2017ISUSpeedSkatingWC-0975*. [Digital Image]. P. 64

Gulotta, R. (2019). *Prince's Island Park 2019 River*. [Digital Image]. P. 65

Calgary and District Lacrosse Association. (n.d.). *CDLA - knights&hornets2*. [Digital Image]. P. 66

Stuart, C. (n.d.). *117628007_626632358283002_8766146066772677464_n*. [Digital Image]. P. 66

Resorts of the Canadian Rockies. (n.d.). *nakiska-ski-area_21064607266_o*. [Digital Image]. P. 66

Holland, D. (n.d.). *Winsport Summer Camps Zipline*. [Digital Image]. P. 66

Section 6

Price, J. (n.d.). *Terrain Park New. 3*. [Digital Image]. P. 71

TheBeachYYC. (n.d.). *Cariann & Elliot's Friday Night Wedding Party - 068*. [Digital Image]. P. 80

Calgary Stampede. (n.d.). *Aerial 24x8 Oblique-01*. [Digital Image]. P. 80

Section 7

Roth and Ramberg Photography Inc. (2014). *Rouge 2014 Green house 002-medium*. [Digital Image]. P. 85

Winsport. (n.d.). *Winsport_EliteHockey-9207438*. [Digital Image]. P. 95

Section 8

Calgary Municipal Land Corporation. (n.d.). *EV Beach*. [Digital Image]. P. 97.

Stuart, C. (n.d.). *118326666_188524126020674_2742745281888732652_n*. [Digital Image]. P. 97.

Case Study images from pages 100-116 came from Unsplash.com

Winsport. (n.d.). *Winsport_AdaptiveProgram-7107439*. [Digital Image]. P. 118

Korol, T. (2014). *Fred Couples celebrates his shot on the 18th hole during the final round of the Shaw Charity Classic gold tournament in Calgary, Alberta*. [Digital Image]. <http://www.experiencecalgarygreenway.com/volunteer-at-the-shaw-charity-classic-golf-tournament/> P. 119

Stuart, C. (n.d.). *102661678_2668380196780672_1098561194828415755_n*. [Digital Image]. P. 120

Buston, D. (n.d.). *Tourism-Winsport Zipline*. [Digital Image]. P. 121

Roth and Ramberg. (2013). *Heritage Park 2013 dance-medium*. [Digital Image]. P. 122

Gar Gar. (2020). *117291664_10158498016604501_964190428890806618_o*. [Digital Image]. P. 123

Diving Canada. (2018). *A12Z0658*. [Digital Image]. P. 124

Calgary Padel. (n.d.). *how to serve an ace...* [Digital Image]. <http://calgarypadel.ca/gallery/> P. 125

Paddlestation. (n.d.). *PS Long wide busy river*. [Digital Image]. P. 126

AdrianMartinus Design. (n.d.). *Mosaic Wall Art*. [Digital Image]. P. 127

Foy, N. (n.d.). *Winsport Terrain*. [Digital Image]. P. 128

Resorts of the Canadian Rockies. (n.d.). *learning-to-ski-with-the-nakiska-winter-sports-school_38476036034*. [Digital Image]. P. 129

Jumpstart. (n.d.). *CTJumpstartNewmarket-77*. [Digital Image]. P. 130

TheBeachYYC. (n.d.). *Cariann & Elliot's Friday Night Wedding Party - 060*. [Digital Image]. P. 131

Semmler, S. (n.d.). *a544883a4a4d898a64cb0369dff730d27eec4934139ca67624ad90305ff4769d*. [Digital Image]. P. 131

Roth and Ramberg. (2017). *Biking 2017 Bow River East Village-small*. [Digital Image]. P. 131

Price, J. (n.d.). *IMG_6665 (2).jpg*. [Digital Image]. P. 131

Resorts of the Canadian Rockies. (n.d.). *abbydell_rcrnakiska14_034_14668274799_o*. [Digital Image]. P. 131

Section 9

Jacobs, J. (2017). *Calgary 2017 Bow Alley-medium*. [Digital Image]. P. 134

Calgary Municipal Land Corporation. (n.d.). *EV Playground*. [Digital Image]. P. 137

Semmler, S. (n.d.). *Tourism-757121708a48958cff0de2fd96141176a5672957efe7d00274e5ba8cb3cb091c.jpg*. [Digital Image]. P. 138

Winsport. (n.d.). *Winsport_CNC-9107005.jpg*. [Digital Image]. P. 139

Aletha. (n.d.). *IMG_4364*. [Digital Image]. P. 141

Stuart, C. (n.d.). *116742305_711931729539526_3881177326799585541_n*. [Digital Image]. P. 141

Resorts of the Canadian Rockies Inc. (n.d.). *nakiska-ski-area_28065635039_o*. [Digital Image]. P. 141

Sport Calgary. (n.d.). *Broomball – IMG9632*. [Digital Image]. P. 141

Section 10

Price, J. (n.d.). *Terrain Park new. 3*. [Digital Image]. P. 143

Paddlestation. (n.d.). *Raft paddlers top view*. [Digital Image]. P. 147

Holt, J. (n.d.). *e231bb6f4d93f03c7cc65fa03940d96ade7dab76d286636d70d4276515538449*. [Digital Image]. P. 147

APPENDIX-16: ACTIVECITY COMMUNITY BOARD MOTIONS – NOVEMBER 18, 2020

MOTION 1:

Forward by David Finch. Seconded by David Legg.

Motion for establishment *ActiveCITY* Transition Group as defined in Playbook 2020, effective November 18, 2020.

- Passed unanimously.

MOTION 2:

Forward by David Finch. Seconded by David Legg.

Cynthia Watson and Chris Dawe nominated to co-chair Transition Group.

- Passed unanimously.

MOTION 3:

Forward by David Finch. Seconded by David Legg.

Motion for acceptance and release of Playbook 2030 on November 25, 2020.

- Passed unanimously.

MOTION 4:

Forward by David Finch. Seconded by David Legg.

Motion to dissolve the 2019-20 *ActiveCITY* Board and governance committee, effective December 4, 2020. *ActiveCITY* Collective responsibilities and assets will be transferred to the *ActiveCITY* Transition Group.

- Passed unanimously.

NOTES

EXECUTIVE SUMMARY

¹ It is important to note that throughout the report the scope of the data may vary by source. For example, in some cases the project team relied on City of Calgary census data, in others on Statistics Canada's defined Census Metropolitan Area (CMA) data. In other aspects, the project team used third party (e.g. Calgary Foundation) definitions of 'Calgary'. These are areas that the project team believed there was a material difference were then identified through a notation.

² Prior to ActiveCITY the largest recorded public engagement in Calgary's history was ImagineCalgary engaging 18,000 people. Refer to: <https://www.calgary.ca/pda/pd/office-of-sustainability/imaginecalgary.html>

SECTION 2

³ Refer to Better Life Index and the New Zealand Government's Living Standards Framework additional information. Refer to the discussion paper, Measuring What Matters by David J. Finch for an overview of the current fragmentation of prosperity measures in Calgary.

⁴ King, A., Huseynli, G., & MacGibbon, N. (2018, February). Wellbeing frameworks for the Treasury (Living Standards Series: Discussion Paper 18/01). New Zealand Government, Office of the Chief Economic Adviser. <https://treasury.govt.nz/sites/default/files/2018-02/dp-18-01.pdf>

⁵ Onyx, J., & Bullen, P. (2016). Measuring social capital in five communities. The Journal of Applied Behavioural Science, 36(1), 23-42. <https://doi.org/10.1177/0021886300361002>

SECTION 3

⁶<https://www150.statcan.gc.ca/n1/daily-quotidien/200904/dq200904a-eng.htm>

⁷<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

⁸<https://www150.statcan.gc.ca/n1/daily-quotidien/200806/dq200806a-eng.htm>

⁹<https://www150.statcan.gc.ca/n1/daily-quotidien/200904/dq200904a-eng.htm>

¹⁰<https://www150.statcan.gc.ca/n1/daily-quotidien/200904/dq200904a-eng.htm>

¹¹<https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators/cibc-index-employment-quality-1994-qi100>

¹²<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

¹³<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110013502>

¹⁴<https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators/housing-affordability-based-shelter-consumption>

¹⁵<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

¹⁶<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

¹⁷<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

¹⁸<https://www.calgary.ca/cfod/finance/Documents/Corporate-Economics/Calgary-and-Region-Economic-Outlook/Calgary-and-Region-Economic-Outlook-2020-Spring.pdf>

¹⁹<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

²⁰<https://data.calgary.ca/Business-and-Economic-Activity/Building-Permits/c2es-76ed>

-
- ²¹<https://www.calgary.ca/cfod/finance/Documents/Corporate-Economics/Calgary-and-Region-Economic-Outlook/Calgary-and-Region-Economic-Outlook-2020-Spring.pdf>
- ²²<https://regionaldashboard.alberta.ca/region/calgary/life-expectancy/#/>
- ²³<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ²⁴<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ²⁵<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ²⁶<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>
- ²⁷<https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators/percentage-canadians-who-report-7-9-hours-good-quality>
- ²⁸<https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets.html>
- ²⁹<https://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/>
- ³⁰<https://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/>
- ³¹<https://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/>
- ³²<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009601>
- ³³<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310039201>
- ³⁴<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310045101>
- ³⁵<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
- ³⁶<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
- ³⁷<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
- ³⁸<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>
- ³⁹<https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators/average-number-nights-away-vacation-trips-destinations-least>
- ⁴⁰<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁴¹<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁴²<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁴³<https://www.calgary.ca/content/dam/www/cfod/csc/documents/cit-sat/proud-to-live-in-neighbourhood.pdf>
- ⁴⁴<https://www.calgary.ca/content/dam/www/cfod/csc/documents/cit-sat/quality-of-life.pdf>
- ⁴⁵<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>
- ⁴⁶<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>
- ⁴⁷<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>
- ⁴⁸<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>
- ⁴⁹<https://uwaterloo.ca/canadian-index-wellbeing/what-we-do/domains-and-indicators/average-number-hours-volunteering-culture-andor-recreation>
- ⁵⁰<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁵¹<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>
- ⁵²<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁵³<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>
- ⁵⁴<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>

⁵⁵<https://www.osler.com/osler/media/Osler/reports/corporate-governance/2019-Diversity-Disclosure-Practices-Women-in-leadership-roles-at-TSX-listed-companies.pdf>

⁵⁶<https://www.calgary.ca/cfod/csc/citizen-satisfaction.html>

⁵⁷<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

⁵⁸<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁵⁹<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁶⁰<https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets.html>

⁶¹<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

⁶²<https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

⁶³<https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets.html>

⁶⁴<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁶⁵<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁶⁶<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁶⁷<http://www.sustainablecalgary.org/publications-1/2020/5/25/2020-state-of-our-city>

⁶⁸<https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets.html>

⁶⁹<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2510002901>

⁷⁰<https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets.html>

⁷¹ Heggie, K. (2018) Indigenous Wellness Indicators: Including Urban Indigenous Wellness

Indicators in the Healthy City Strategy. Social Policy and Projects. City of Vancouver. Retrieved from: https://sustain.ubc.ca/sites/default/files/2018-62%20Indigenous%20Wellness%20Indicators_Heggie.pdf

⁷² NAICS classifies all economic activities into 20 sectors. For instance, in 2017 there were 20 sectors and 1,057 industries identified. The classification system is done at an establishment-level which is generally a single physical location where business is conducted or where services or industrial operations are performed. An establishment is then classified in an industry when its primary activity meets the definition for that industry. If an establishment is engaged in more than one activity, the industry code is assigned based on the establishment's principle product or group of products or services rendered.

⁷³For more information on Nesta's creative economy mapping work, refer to Bakhshi, H., Freeman, A., & Higgs, P. (2012). A dynamic mapping of the UK's creative industries', Nesta. <https://eprints.qut.edu.au/57251/1/57251.pdf>

⁷⁴ In 2019 Calgary hosted the Play Summit. In recognition of Nov. 20 being National Child Day and celebrating the 30th anniversary of the signing of the United Nations Convention on Rights of the Child by Canada, members at the Summit signed a pledge to promote Calgary as a playful city for all. For more information refer to: <https://www.calgary.ca/csps/recreation/events/calgary-play-summit.html>)

⁷⁵ Secondary Intensity Support

Active Tourism

In conversation with Alberta Economic Development, Trade and Tourism, the project team agreed that at least 13 per cent (4,710,000/34,900,000) of Canadian visits and at least 69 per cent (1,383,000/2,000,000) of international visits included an active activity. Average overseas visitor stays 19 nights. Average US visitor spends five nights (SC). US visitors = 68 per cent. Overseas = 32 per cent. Domestic represents 2.4 nights.

Based on above data, 25 per cent of hotel nights are tied to activity. This accounts for variance in US/ Overseas and Canadian travel.

Elementary & Secondary Schools

Create options – 100 per cent since all students must take Phys. Ed., or five per cent based on the number of teachers who are Phys. Ed. Teachers. *In 2018, per cent of elementary schools in Ontario have a dedicated H&PE teacher. 81 per cent of Canadian schools offer sport/ active recreation extracurricular programming.*

Other Schools

Other schools may have to be based on ratio of Statistics Canada examples which are active vs. not. 27 per cent of schools listed under NAICS are active.

Media/ Advertising

37 per cent tied to sport in US (2015). 26 per cent of all content spend on sports rights. 79 per cent of sponsorship spend in Canada is tied to sport.

Civic and Social Organizations

150 Community Associations are located in – Use actual number for Calgary – Included in Org. list

Other

Use actual local numbers for consumer goods rentals. 25 per cent of listed sub-sectors are in active economy.

⁷⁶ Moderate Intensity Support

Shoes Stores

Athletic footwear accounts for 15 per cent of total global sales.

Casino

2.2 per cent of casino revenue in 2018 tied to sport. Estimated to increase to 20 per cent in five years.

Truck/ Recreation

In 532120 30 per cent of listed sub-sectors in active economy.

In 415190 42 per cent of listed sub-sectors in active economy.

⁷⁷ For more information refer to the National Occupation Classification system at <https://noc.esdc.gc.ca/Home/AboutTheNoc/dfd93eedac3c474881056aac14995559>

⁷⁸ The basic principle of classification is the kind of work performed which is determined by the tasks, duties, and responsibilities of the occupation. Factors such as the materials processed or used, the industrial processes and the equipment used, the degree of responsibility and complexity of work, as well as the products made and services provided, have been considered as indicators of work.

⁷⁹ A parallel graphic with a specific community example inserted would amplify and clarify the message (i.e indoor sport facility safe place for organized sport and activity sessions that isn't weather dependent □ x amount of hours of sport and physical activity by x number of community members during x period of time □ increased physical activity and social gathering that had measurable improvements on health and wellness across various demographics).

SECTION 4

⁸⁰ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf

⁸¹ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>

⁸² Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>

⁸³ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>

⁸⁴ Statistics Canada - 1996 Census. Catalogue Number 93F0026XDB96001.

Statistics Canada - 2006 Census. Catalogue Number 97-562-XCB2006006.

Statistics Canada. 2017. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

⁸⁵ Statistics Canada - 1996 Census. Catalogue Number 93F0026XDB96001.

Statistics Canada. 2017. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>.

⁸⁶ Statistics Canada. (2019, May 21). Sports for fun and fitness. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/190521/dq190521c-eng.pdf?st=e6HQrqtH>

⁸⁷ Canadian Women & Sport. (2020, June). The rally report: Encouraging action to improve sport for women and girls. https://womenandsport.ca/wp-content/uploads/2020/06/Canadian-Women-Sport_The-Rally-Report.pdf

⁸⁸ Statistics Canada, NHS Aboriginal Population Profile for Calgary (CSD). 2011; Statistics Canada, Calgary (CSD) Census Profile, 2011.

⁸⁹ Forsyth, J. (2020). Reclaiming Tom Longboat: Indigenous self-determination in Canadian sport. <https://uofrpress.ca/Books/R/Reclaiming-Tom-Longboat>

⁹⁰ For more information, refer to:

Active Neighbourhoods Canada. (n.d.). Let's have a conversation about healthy places: Toward healthy Canadian communities! https://participatoryplanning.ca/sites/default/files/upload/document/tool/ceum-rqv-nos_quartiers_parlons-en-ang-web_vf.pdf

Renzetti, E. (2017, May 20). So you turned 100. Who says you have to slow down? *The Globe and Mail*. <https://www.theglobeandmail.com/opinion/the-hordes-of-centenarians-are-coming-with-adventure-vigour-and-ambition/article35066988/>

⁹¹ Statistics Canada - 1996 Census. Catalogue Number 93F0021XDB96001.

Statistics Canada. 2017. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

⁹² Macridis, S., & Johnston, N. (2019). 2019 Alberta survey on physical activity. Centre for Active Living. https://www.centre4activeliving.ca/media/filer_public/0a/3c/0a3ca055-13c2-4ac6-930d-f3062086d118/2019-ab-survey-physical-activity.pdf

⁹³ For additional reading on how life expectancy will change how you design you, please see: Gratton, L., & Kirkland, R. (2016, June 6). Are you ready to live to 100? McKinsey & Company. <http://www.mckinsey.com/business-functions/organization/our-insights/are-you-ready-to-live-to-100> and

Eichler, L. (2016, July 15). Pacing your career when you plan to live to 100. *The Globe and Mail*. <http://www.theglobeandmail.com/report-on-business/careers/career-advice/life-at-work/pacing-your-career-when-you-plan-to-live-to-100/article30938836/>

⁹⁴ Health Quality Council of Alberta. (2015, July 29). Overweight & obesity in adult Albertans: A role for primary healthcare. <https://hqca.ca/news/2015/07/overweight-obesity-in-adult-albertans-a-role-for-primary-healthcare/>

⁹⁵ Macridis, S., & Johnston, N. (2019). 2019 Alberta survey on physical activity. Centre for Active Living. https://www.centre4activeliving.ca/media/filer_public/0a/3c/0a3ca055-13c2-4ac6-930d-f3062086d118/2019-ab-survey-physical-activity.pdf

⁹⁶ Edmonton Sport Council. Live Active Strategy (2016-26). https://www.edmonton.ca/city_government/documents/LiveActiveStrategy.pdf

⁹⁷ Alberta Survey on Physical Activity. Centre for Active Living. <https://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/>

⁹⁸ Alberta Survey on Physical Activity. Centre for Active Living. <https://www.centre4activeliving.ca/our-work/alberta-survey-physical-activity/>

⁹⁹ World Health Organization. (2020, January 30). Fact Sheet on Depression. <https://www.who.int/news-room/fact-sheets/detail/depression>

-
- ¹⁰⁰ World Health Organization (2017, March 30). "Depression: let's talk" says WHO, as depression tops list of causes of ill health. <https://www.who.int/news-room/detail/30-03-2017--depression-let-s-talk-says-who-as-depression-tops-list-of-causes-of-ill-health>
- ¹⁰¹ Municipal Benchmarking Network Canada. http://mbncanada.ca/app/uploads/2019/11/2018_FINAL_Performance_Report_OCT-30-2019.pdf
- ¹⁰² Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹⁰³ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹⁰⁴ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹⁰⁵ It is recognized that other programs, including Arts and Sciences provide a strong educational foundation. Given their scope, these are not explicitly identified on this list.
- ¹⁰⁶ Project team research.
- ¹⁰⁷ Moreover, Calgary's population growth is forecasted to generate almost 2.5 million more trips every day by 2040. Refer to: Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁰⁸ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹⁰⁹ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹¹⁰ How to cite: Statistics Canada. 2017. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
- ¹¹¹ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹¹² Stokes Economics, Corporate Economics, as in Calgary and Region Economic Outlook 2020-2025
Calgary and Region Economic Outlook 2020-2025
- ¹¹³ The OGR index is derived by determining the oil and gas industry's contribution to three areas of Calgary's economy: employment (the Conference Board of Canada Metropolitan Outlook Report), GDP (the Conference Board of Canada), and net exports (Government of Alberta, Alberta Finance and Enterprise). These three values are reflected as per centages, which are then added together and divided by 3. An index of 100 would be total reliance. Refer to: Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹¹⁴ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹¹⁵ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹¹⁶ Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. <https://calgaryeconomicdevelopment.com/dmsdocument/22>
- ¹¹⁷ EY Location Cost Index 2017-18 Peer Cities: Albany, Chicago, Columbus, Edmonton, Grand Rapids, Milwaukee, Minneapolis, Salt Lake City, San Jose, Saskatoon, Seattle, Toronto, Vancouver. Refer to: Ernst & Young. (n.d.). Comparing business investment and operating costs in Calgary and selected cities: EY Location Cost Index overview and results 2017-2018. <https://www.calgaryeconomicdevelopment.com/dmsdocument/198>

-
- ¹¹⁸ Statistics Canada, CMA Population, July 1, 2018 and Canadian Business Counts, December 2018
1 to 49 Employees (Per 1,000 Population) as found in *Vital Signs 2019 Report: Research Indicators*
- ¹¹⁹ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹²⁰ Mateos-Garcia, J., Klinger, J., & Stathoulopoulos, K. (2018). *Creative Nation: How the Creative Industries are Powering the UK's Nations and Regions*. London: Nesta.
- ¹²¹ *The City of Calgary. (2020). Calgary and region economic outlook 2020-2025.* <https://www.calgary.ca/cfod/finance/Documents/Corporate-Economics/Calgary-and-Region-Economic-Outlook/Calgary-and-Region-Economic-Outlook-2020-Spring.pdf>
- ¹²² Government of Alberta, 2017
- ¹²³ Wang, W. (2020, July 8). The decline in production and investment in Canada's oil and gas sector and its impact on the economy (Statistics Canada Catalogue no. 11-626-X — 2020007 - No. 109). Retrieved from Statistics Canada website: <https://www150.statcan.gc.ca/n1/pub/11-626-x/11-626-x2020007-eng.htm>
- ¹²⁴ Pike, H. (2019, March 1). Calgary must 'fix the talent pipeline' to attract high-tech business, says economic development boss. CBC. <https://www.cbc.ca/news/canada/calgary/calgary-economic-development-moran-report-2018-1.5038592>
- ¹²⁵ PwC. (n.d.). *Building the energy workforce of the future.* <https://www.pwc.com/ca/en/industries/energy/energy-visions-2019/from-tech-to-transformation/building-the-energy-workforce-of-the-future.html>
- ¹²⁶ *Envionics Analytics HouseholdSpend* [2019]. Retrieved <https://simplyanalytics.com/>
- ¹²⁷ *All Figures from: The City of Calgary. (2019). One Calgary: 2019-2022 service plans and budgets.* <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>
- ¹²⁸ There are likely other granting agencies and programs not included such as Calgary Neighbourhoods which has a budget for Capital Conservation Grants.
- ¹²⁹ *The City of Calgary. (2019). One Calgary: 2019-2022 service plans and budgets. P. 345-51.* <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>
- ¹³⁰ Each municipality is based on the most recent approved budget. Both operating and capital expenditures are averaged to an annual expenditure on a per capita basis. For more information refer to the respective municipal budgets below:
- Edmonton:
- https://www.edmonton.ca/city_government/documents/APPROVED_Capital_Budget_2019_2022.pdf
- https://www.edmonton.ca/city_government/documents/2020_Spring_Supplemental_Operating_Budget_Adjustment_includingCOVID19adjustments.pdf
- https://www.edmonton.ca/city_government/documents/APPROVED_2019-2022_OPERATING_BUDGET.pdf
- https://www.edmonton.ca/city_government/documents/2019_2022_Approved_Capital_Profiles_Final_06_12_19.pdf
- Winnipeg:
- https://www.winnipeg.ca/finance/files/2020PreliminaryBudget_Volume2.pdf
- <https://www.winnipeg.ca/interhom/Budget/2020Budget/pdfs/2020-2023-Parks-and-Open-Space-Preliminary-Operating-Capital-Budget-Presentation.pdf>
- https://www.winnipeg.ca/finance/files/2020AdoptedCapitalBudget_Volume3.pdf
- Hamilton:
- <https://www.hamilton.ca/sites/default/files/media/browser/2020-07-21/2020-approved-operating-capital-budget-book.pdf>
- <https://www.hamilton.ca/sites/default/files/media/browser/2019-12-11/2020-preliminary-tax-operating-budget-book-appendix-a-report-fcs20001.pdf>

Ottawa

https://documents.ottawa.ca/sites/documents/files/2020Adopt_EN.pdf

Regina:

<https://www.regina.ca/export/sites/Regina.ca/city-government/budget-finance/.galleries/pdfs/2020-Proposed-Budget-Book.pdf>

¹³¹ Government of Alberta. (2020). Sport, physical activity, and recreation – Grant programs: Project, operating, association development and other funding. [https://www.alberta.ca/sport-physical-activity-and-recreation-grant-programs.aspx#:~:text=This per cent20grant per cent20provides per cent20funding per cent20to,deliver per cent20sporting per cent20opportunities per cent20to per cent20Albertans.&text=Podium per cent20Alberta per cent20provides per cent20funding per cent20to,training per cent20C per cent20equipment per cent20and per cent20living per cent20costs](https://www.alberta.ca/sport-physical-activity-and-recreation-grant-programs.aspx#:~:text=This%20grant%20provides%20funding%20to,deliver%20sporting%20opportunities%20to%20Albertans.&text=Podium%20Alberta%20provides%20funding%20to,training%20C%20equipment%20and%20living%20costs).

¹³² Excludes general economic incentives or grant programs not directly targeting an active economy sector.

¹³³ Refer to: <https://industry.travelalberta.com/news-media/industry-news/2020/03/budget-2020#:~:text=In%20the%20Alberta%20budget%20released,and%20job%20creation%20for%20Alberta>.

¹³⁴ For additional information please see: <https://www.canada.ca/en/canadian-heritage/services/role-sport-canada.html>

¹³⁵ Infrastructure Canada. (n.d.). Investing in Canada plan project map. Government of Canada. <https://www.infrastructure.gc.ca/gmap-gcarte/index-eng.html>

¹³⁶ Infrastructure Canada. (n.d.). Infrastructure Canada's funding programs. Government of Canada. <https://www.infrastructure.gc.ca/prog/programs-infc-summary-eng.html>

¹³⁷ Infrastructure Canada. (n.d.). Infrastructure Canada's funding programs. Government of Canada. <https://www.infrastructure.gc.ca/prog/programs-infc-summary-eng.html>

¹³⁸ Statistics Canada, Financial Data and Charitable Donations data collected by CRA, Table 111-0001

as found in Vital Signs 2019 Report: Research Indicators

¹³⁹ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf

¹⁴⁰ Callaghan, E., & Colton, J. (2008). Building sustainable & resilient communities: A balancing of community capital. *Environment, Development and Sustainability*, 10(6), 931–942. <https://doi.org/10.1007/s10668-007-9093-4>

¹⁴¹ Municipal Benchmarking Network Canada. http://mbncanada.ca/app/uploads/2019/11/2018_FINAL_Performance_Report_OCT-30-2019.pdf

¹⁴² Calgary Foundation. (2019). Calgary's Vital Signs. <https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

¹⁴³ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf

¹⁴⁴ The City of Calgary. (2019). *One Calgary: 2019-2022 service plans and budgets*. P. 337. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>

¹⁴⁵ The City of Calgary. (2019). *One Calgary: 2019-2022 service plans and budgets*. P. 337. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>

¹⁴⁶ The City of Calgary. (2020, August 6). Parks Off- Leash. <https://data.calgary.ca/Recreation-and-Culture/Parks-Off-Leash/xrct-ap62>

¹⁴⁷ The City of Calgary. (2019). *One Calgary: 2019-2022 service plans and budgets*. P. 337. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>

-
- ¹⁴⁸ Government of Canada. (2019, December 4). *Canadian climate normals 1981–2010*. https://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnProv&lstProvince=AB&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=2205&dispBack=0
- ¹⁴⁹ Environment Canada. Meteorological Service of Canada. Canadian Climate Normals. 1981–2010 Climate Normals & Averages
- ¹⁵⁰ Sunshine Mountain Lodge. (n.d.). Banff Sunshine Village Ski & Snowboard Resort. <https://www.sunshinemountainlodge.com/sunshine-village>
- ¹⁵¹ Government of Canada. (2019, December 4). *Canadian climate normals 1981–2010*. https://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnProv&lstProvince=AB&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=2205&dispBack=0
- ¹⁵² Refer to: <https://www.alberta.ca/climate-change-alberta.aspx>
- ¹⁵³ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁵⁴ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁵⁵ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁵⁶ Fair share is a per capita calculation if every person on earth shared resources equally based on the planet’s capacity. For more information, refer to: Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- For ecological footprint data refer to: Isman, M., Archambault, M., Racette, P., Konga, C., Llaque, R., Lin, D., Iha, K., & Ouellet-Plamondon, C. (2018). Ecological footprint assessment for targeting climate change mitigation in cities: A case study of 15 Canadian cities according to census metropolitan areas. *Journal of Cleaner Production*, 174, 1032–1043. <https://doi.org/10.1016/j.jclepro.2017.10.189>
- ¹⁵⁷ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁵⁸ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf
- ¹⁵⁹ *All Figures from The City of Calgary*. (2019). *One Calgary: 2019-2022 service plans and budgets*. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>
- ¹⁶⁰ Refer to: <https://www.calgarytransit.com/about-us/facts-and-figures/statistics>
- ¹⁶¹ *The City of Calgary*. (2019). *One Calgary: 2019-2022 service plans and budgets*. p.289-295. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>
- ¹⁶² All infrastructure is based on facilities per 100,000 except playgroups. Playgrounds are based on number per 200,000. Other city-built resource data was sourced from publicly available information following the identical definition and scope used in the Calgary built capital inventory. Cities were selected based on the quality of public domain data; however, some variance will exist due to quality of data available in some jurisdictions.
- ¹⁶³ *The City of Calgary*. (2019). *One Calgary: 2019-2022 service plans and budgets*. P. 289-295. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>
- ¹⁶⁴ Under review.

¹⁶⁵ Morar, Sahil. (2019, May 1). Cycling in downtown Calgary has seen 679 per cent rise since 1991. DH News. <https://dailyhive.com/calgary/cycling-downtown-calgary-rise-1991#:~:text=In%201991%2C%20the%20City%20of,and%20passengers%20entering%20the%20area.>

¹⁶⁶ The City of Calgary. (2019). *One Calgary: 2019-2022 service plans and budgets*. 291. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>

¹⁶⁷ The City of Calgary. (2019). *One Calgary: 2019-2022 service plans and budgets*. p.289-295. <https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/plans-and-budget-2019-2022.html>

SECTION 5

¹⁶⁸ The estimate is based on methodology adopted by the Conference Board of Canada and incorporates economic contribution of both employees and volunteers. The contribute of volunteers is estimated to be \$400M for both scenarios based on Conference Board of Canada methodology. The GDP contribution range is influenced by income. At the 2020 average weekly wage in Alberta is \$1246, its impact is \$2.8 billion. A more conservative number of hourly wages of \$27 for the social sector provides an impact of \$2.2 billion. For additional information on the Conference Board of Canada methodology, refer to: *The Conference Board of Canada (2018, April 5). The value of volunteering in Canada.*

<https://www.google.com/search?q=The+Value+of+Volunteering+in+Canada&oq=The+Value+of+Volunteering+in+Canada&aqs=chrome,69i57.285j0j7&sourceid=chrome&ie=UTF-8>

For additional reading refer to: Statistics Canada. (2015, November 27). The contribution of small and medium-sized businesses to gross domestic product: A Canada-United States comparison. <https://www150.statcan.gc.ca/n1/pub/11f0027m/2011070/part-partie1-eng.htm>

As previously noted, due to the limitations of Statistics Canada's National Occupation data, this estimate excludes active economy occupations outside of active economy organizations. For this reason, the project team believes it is highly conservative.

¹⁶⁹ Estimated based on author analysis. Imagine Canada reports that an estimated 21 per cent of all volunteering is associated with sport and recreation and nine per cent for health. Imagine Canada also reports a total of ten per cent of all volunteer hours (aged 15 and older) are associated with sport, recreation, and health. The average hours reported by Imagine Canada volunteered for sport & recreation is 133 hours. Refer to Imagine Canada report for additional details:

Gumulka, G., Barr, C., Lasby, D., & Brownlee, B. (2005). Understanding the capacity of sports and recreation organizations: A synthesis of findings from the National Survey of Nonprofit and Voluntary Organizations and the National Survey of Giving, Volunteering and Participating. Imagine Canada.

http://sectorsource.ca/sites/default/files/resources/files/understanding_capacity_of_sports_rec_report.pdf

¹⁷⁰ Following the methodology adopted by the Conference board of Canada, the project team estimated the value of volunteer work by multiplying the total number of volunteer hours by the value of work, measured as the average hourly wage in the core social sector (\$27 per hour). For additional information on the Conference Board of Canada methodology, refer to: *The Conference Board of Canada (2018, April 5). The value of volunteering in Canada.*

<https://www.google.com/search?q=The+Value+of+Volunteering+in+Canada&oq=The+Value+of+Volunteering+in+Canada&aqs=chrome,69i57.285j0j7&sourceid=chrome&ie=UTF-8>

¹⁷¹ *Environics Analytics HouseholdSpend* [2019]. Retrieved <https://simplyanalytics.com/>

¹⁷² *Environics Analytics HouseholdSpend* [2019]. Retrieved <https://simplyanalytics.com/>

¹⁷³ *Environics Analytics HouseholdSpend* [2019]. Retrieved <https://simplyanalytics.com/>

¹⁷⁴ To provide a consistent view of social media engagement, the index considered social followers (Twitter, Facebook, Instagram, and YouTube) of team s in the NHL, CFL, NLL and the CPL or MLS as of August 10, 2020. Both the Toronto Raptors and Toronto Blue Jays were excluded for this measure. The aggregated followers were divided by city population to provide a consistent per capita score. This score was then multiplied by 100 for visualization. For proportion of attendance, the project team considered the latest completed season attendance as a proportion of available seats in the arena or stadium. It then averaged this attendance score. The Ottawa Atletico of the CPL was excluded from the scoring as this is their inaugural season. FC Edmonton attendance was also excluded as they play in Commonwealth Stadium and a proportion of seats is not a fair representation.

¹⁷⁵ Data provided by Tourism Calgary

¹⁷⁶ Tourism Calgary uses Destination International's event impact calculator which accesses underlying data inputs and incorporates findings from the Travel Survey of Residents of Canada, the type of event and its unique characteristics, IMPLAN's regional economic research analysis, and provincial and municipal budgets to generate an economic impact assessment.

¹⁷⁷ Active recreation expenditures sourced from *Environics Analytics Household Spend* [2019]. Retrieved <https://simplyanalytics.com/>

¹⁷⁸ Active recreation expenditures sourced from *Environics Analytics Household Spend* [2019]. Retrieved <https://simplyanalytics.com/>

¹⁷⁹ Government of Alberta data, available at: Alberta Government. (n.d.). Calgary – Housing starts. <https://regionaldashboard.alberta.ca/region/calgary/housing-starts/#/?from=2015&to=2019>

¹⁸⁰ For sponsorship data, refer to: Canadian Sponsorship Landscape Study. (2020). <https://www.sponsorshiplandscape.com/cs/sl/>

¹⁸¹ Consumption estimates provided by Travel Alberta.

¹⁸² Active recreation expenditures sourced from *Environics Analytics Household Spend* [2019]. Retrieved <https://simplyanalytics.com/>

SECTION 6

¹⁸³ The estimate is based on methodology adopted by the Conference Board of Canada and incorporates economic contribution of both employees and volunteers. The contribute of volunteers is estimated to be \$400 million for both scenarios based on Conference Board of Canada methodology. The GDP contribution range is influenced by income. At the 2020 average weekly wage in Alberta is \$1246, its impact is \$2.8 billion. A more conservative number of hourly wages of \$27 dollars for the social sector provides an impact of \$2.2 billion. For additional information on the Conference Board of Canada methodology, refer to: *The Conference Board of Canada (2018, April 5). The value of volunteering in Canada.* <https://www.google.com/search?q=The+Value+of+Volunteering+in+Canada&oq=The+Value+of+Volunteering+in+Canada&aqs=chrome,69j57.285j0j7&sourceid=chrome&ie=UTF-8>

For additional reading refer to: Statistics Canada. (2015, November 27). The contribution of small and medium-sized businesses to gross domestic product: A Canada-United States comparison. <https://www150.statcan.gc.ca/n1/pub/11f0027m/2011070/part-partie1-eng.htm>

¹⁸⁴ Manuel, D. (2016). A \$4.9 billion decrease in healthcare expenditure. Institute for Clinical Evaluative Sciences.

¹⁸⁵ Colman, R., & Walker, S. (2004, November). The cost of physical inactivity in British Columbia. B.C. Ministry of Health Planning. <https://gpiatlantic.org/pdf/health/inactivity-bc.pdf>

This model is based on reducing the proportion of the population who are defined as physically inactive by ten per cent. For example, if the current proportion of the population who are physically inactive is 40 per cent, reducing it by four per cent to 36 per cent would reflect a ten per cent reduction.

¹⁸⁶ International Sport and Culture Association, & Centre for Economics and Business Research. (2015). The economic cost of physical inactivity in Europe. <https://inactivity-time-bomb.nowwemove.com/download-report/The%20Economic%20Costs%20of%20Physical%20Inactivity%20in%20Europe%20%28June%202015%29.pdf>

¹⁸⁷ Calculated by a reduction in premature mortality effectively increasing the total number of Canadians available and willing to work. Refer to:

Bounajm, F., Dinh, T., & Thériault, L. (2014, October). *Moving ahead: The economic impact of reducing physical inactivity and sedentary behaviour.* The Conference Board of Canada. [https://www.conferenceboard.ca/temp/2d45b6dc-91dd-4d3a-a21f-61fb884938ff/6436_MovingAheadRPI-BR\(PUB3386\).pdf](https://www.conferenceboard.ca/temp/2d45b6dc-91dd-4d3a-a21f-61fb884938ff/6436_MovingAheadRPI-BR(PUB3386).pdf)

Additional reading at: Bounajm, F., Dinh, T., & Thériault, L. (2015, February). Moving ahead: The economic impact of reducing physical inactivity and sedentary behaviour. Alberta Centre for Active Living Research Update, 22(1). https://www.centre4activeliving.ca/media/filer_public/5b/2f/5b2f73fb-cc21-46de-836d-dd49b5357ea0/2015-feb-sedentary.pdf

¹⁸⁸ Refer to C-2 in: Sport Singapore. (2019, February). Live better through sport: Giving back. https://issuu.com/sportsingapore/docs/for_ebook_190301_sportsg_live_book/2?ff&e=29442121/68402603

Also see: Ministry of Health. 2019. Annual Data Explorer 2018/19: New Zealand Health Survey [Data File]. <https://minhealthnz.shinyapps.io/nz-health-survey-2018-19-annual-data-explorer/>

¹⁸⁹ Department for Digital, Culture, Media, and Sport, & Strategy Unit. (2002, December). Game plan: A strategy for delivering Government's sport and physical activity objectives. Cabinet Office. http://www.gamesmonitor.org.uk/files/game_plan_report.pdf

-
- ¹⁹⁰ Scarborough, P., Bhatnagar, P., Wickramasinghe, K., Allender, S., Foster, C., & Rayner, M. (2011). The economic burden of ill health due to diet, physical inactivity, smoking, alcohol, and obesity in the UK: an update to 2006-07 NHS costs. *Journal of Public Health (Oxford, England)*, 33(4), 527–535. <https://doi.org/10.1093/pubmed/fdr033>
- ¹⁹¹ As cited in: Skinner, J., Zakus, D., & Cowell, J. (2008). Development through sport: Building social capital in disadvantaged communities. *Sport Management Review*, 11(3), 253–275. [https://doi.org/10.1016/s1441-3523\(08\)70112-8](https://doi.org/10.1016/s1441-3523(08)70112-8)
- ¹⁹² Calculated in 2020 dollars. Indirect costs accounted for 50.5 per cent of the total costs, while direct costs accounted for the remaining 49.5 per cent of the total costs. 22 health conditions include: Type 2 diabetes; Cardiovascular diseases (hypertension, coronary heart disease, and cerebrovascular disease); Osteoarthritis; Gallbladder disease; Asthma; Mental illnesses; (e.g. depression and anxiety); 14 types of cancer; Bladder cancer; Colorectal cancer; Endometrial cancer; Esophageal cancer; Kidney cancer; Leukaemia; Liver cancer; Multiple myeloma; Non-Hodgkin's lymphoma; Ovarian cancer; Pancreatic cancer; Postmenopausal breast cancer; Prostate cancer; Stomach cancer
- ¹⁹³ Janssen, I. (2012). Healthcare costs of physical inactivity in Canadian adults. *Applied Physiology, Nutrition, and Metabolism*, 37(4), 803–806. <https://doi.org/10.1139/h2012-061>
- ¹⁹⁴ Canadian adults refer to: *Obesity Canada. (2020). Obesity in Canada. https://obesitycanada.ca/obesity-in-canada/#:~:text=As per cent20a per cent20leading per cent20cause per cent20of,is per cent20directly per cent20attributable per cent20to per cent20obesity*
- ¹⁹⁵ Hendriksen, I., Simons, M., Garre, F., & Hildebrandt, V. (2010). The association between commuter cycling and sickness absence. *Preventive Medicine*, 51(2), 132–135. <https://doi.org/10.1016/j.ypmed.2010.05.007>
- Van den Heuvel, S., Boshuizen, H., Hildebrandt, V., Blatter, B., Ariëns, G., & Bongers, P. (2005). Effect of sporting activity on absenteeism in a working population. *British Journal of Sports Medicine*, 39(3), e15–e15. <https://doi.org/10.1136/bjism.2004.013052>
- Proper, K., Van den Heuvel, S., De Vroome, E., Hildebrandt, V., & Van der Beek, A. (2006). Dose–response relation between physical activity and sick leave. *British Journal of Sports Medicine*, 40(2), 173–178. <https://doi.org/10.1136/bjism.2005.022327>
- ¹⁹⁶ Aldana, S., & Pronk, N. (2001). Health promotion programs, modifiable health risks, and employee absenteeism. *Journal of Occupational and Environmental Medicine*, 43(1), 36–46. <https://doi.org/10.1097/00043764-200101000-00009>
- Burton, W. N., McCalister, K. T., Chen, C.-Y., & Edington, D. W. (2005). The association of health status, worksite fitness center participation, and two measures of productivity. *Journal of Occupational and Environmental Medicine*, 47(4), 343–351. <https://doi.org/10.1097/01.jom.0000158719.57957.c6>
- Goetzel, R. Z., & Ozminkowski, R. J. (2008). The health and cost benefits of work site health-promotion programs. *Annual Review of Public Health*, 29(1), 303–323. <https://doi.org/10.1146/annurev.publhealth.29.020907.090930>
- ¹⁹⁷ Marsden Jacob Associates. (2018, March 1). Active impacts: The economic impacts of active recreation in Victoria. Sport and Recreation Victoria. https://sport.vic.gov.au/__data/assets/pdf_file/0026/56537/the20economic20impacts20of20active20recreation20in20victoria_0.pdf
- ¹⁹⁸ Urban Transportation Task Force. (2012, April) The high cost of congestion in Canadian cities. Council of Ministers Responsible for Transportation and Highway Safety. <https://cutaactu.ca/sites/default/files/uttfc-congestion-2012.pdf>
- ¹⁹⁹ Bureau of Transport and Regional Economics. (2007) Estimating urban traffic and congestion cost trends for Australian cities (Working Paper 71). Department of Transport and Regional Services. http://www.bitre.gov.au/publications/2007/files/wp_071.pdf
- ²⁰⁰ INRIX. (2020). Traffic congestion cost UK motorists over £37.7 billion in 2017. <https://inrix.com/press-releases/scorecard-2017-uk/>
- ²⁰¹ Herein, the project team used human capital as a synonym to high-valued talent and defines competencies as capital, similar to other forms of capital (e.g., financial capital, social capital). Human capital can be viewed at the level of an individual, institution (e.g., organization or ecosystem) or city.
- ²⁰² For additional reading on talent and geography refer to:
- Florida, R. (2002). The economic geography of talent. *Annals of the Association of American Geographers*, 92(4), 743–755. <https://doi.org/10.1111/1467-8306.00314>
- Glaeser, E. L., & Gottlieb, J. D. (2016). Urban resurgence and the consumer city. *Urban Studies (Edinburgh, Scotland)*, 43(8), 1275–1299. <https://doi.org/10.1080/00420980600775683>

-
- Thomas, E., Serwicka, I., & Swinney, P. (2015, November). Urban demographics: Why people live where they do. Centre for Cities. <https://www.centreforcities.org/wp-content/uploads/2015/11/15-11-02-Urban-Demographics.pdf>
- Vijayakumar, I., Lanvin, B., & Mohan, H. (2009). Global mobility of talents: What will make people move, stay, or leave in 2015 and beyond? The Global Information Technology Report 2008-2009. <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=BD3E18A30F3513FDABAA1C62F8E23A9E?doi=10.1.1.511.2225&rep=rep1&type=pdf>
- ²⁰³ Davis, A. (2010, March). Value for money: An economic assessment of investment in walking and cycling. Government Office for the South West. <https://bikehub.ca/sites/default/files/valueformoneyaneconomicassessmentofinvestmentinw.pdf>
- ²⁰⁴ Lawlor, E. (2014) The pedestrian pound: The business case for better streets and places. Living Streets <https://www.livingstreets.org.uk/media/3890/pedestrian-pound-2018.pdf>
- Also refer to: Raje, F., & Saffrey, A. (2016). *The value of cycling*. Department for Transport. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509587/value-of-cycling.pdf
- ²⁰⁵ Pivo, G., & Fisher, J. D. (2011). The walkability premium in commercial real estate investments. *Real Estate Economics*, 39(2), 185–219. <https://doi.org/10.1111/j.1540-6229.2010.00296.x>
- ²⁰⁶ Cortright, J. (2009, August 1). Walking the walk: How walkability raises home values in U.S. cities. CEOs for Cities. https://nacto.org/docs/usdg/walking_the_walk_cortright.pdf
- ²⁰⁷ Kuhlman, R. (2010.) Helping Johnny walk to school: Policy recommendations for removing barriers to community-centered schools. National Trust for Historic Preservation. http://www.bestfacilities.org/best-home/docuploads/pub/214_helping-johnny-walk-to-school.pdf
- ²⁰⁸ Raje, F., & Saffrey, A. (2016). *The value of cycling*. Department for Transport. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/509587/value-of-cycling.pdf
- ²⁰⁹ A 19: Filardo, M., Vincent, J. M., Allen, M., & Franklin, J. (2010, April). Joint use of public schools: A framework for a new social contract. 21st Century School Fund and Center for Cities & Schools. <http://www.21csf.org/csf-home/publications/ConceptPaperJointUseofPublicSchools.pdf>
- ²¹⁰ Gotschi, T. (2011). Costs and benefits of bicycling investments in Portland, Oregon. *Journal of Physical Activity & Health*, eight Suppl 1(s1), S49–S58. <https://doi.org/10.1123/jpah.8.s1.s49>
- ²¹¹ Guo, J. Y., & Gandavarapu, S. (2009). An economic evaluation of health-promotive built environment changes. *Preventive Medicine*, 50, S44–S49. <https://doi.org/10.1016/j.ypmed.2009.08.019>
- ²¹² For an overarching review of the benefits to an individual, please refer to: Bailey, R., Hillman, C., Arent, S., & Petitpas, A. (2012). Physical activity as an investment in personal and social change: The human capital model. *Journal of Physical Activity and Health*, 9(8), 1053-1055.
- ²¹³ Obesity Canada. (2020). *Obesity in Canada*. <https://obesitycanada.ca/obesity-in-canada/#:~:text=As per cent20a per cent20leading per cent20cause per cent20of, is per cent20directly per cent20attributable per cent20to per cent20obesity>
- ²¹⁴ Public Health Agency of Canada. (2016, December). How healthy are Canadians? A trend analysis of the health of Canadians from a healthy living and chronic disease perspective. <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/how-healthy-canadians/pub1-eng.pdf>
- ²¹⁵ Lee, I. M., Shiroma, E. J., Lobelo, F., Puska, P., Blair, S. N., Katzmarzyk, P. T., & Lancet Physical Activity Series Working Group. (2012). Effect of physical inactivity on major non-communicable diseases worldwide: An analysis of burden of disease and life expectancy. *Lancet* (London, England), 380(9838), 219–229. [https://doi.org/10.1016/S0140-6736\(12\)61031-9](https://doi.org/10.1016/S0140-6736(12)61031-9)
- ²¹⁶ Meyer, P., Kayser, B., & Mach, F. (2009). Stair use for cardiovascular disease prevention. *European Journal of Cardiovascular Prevention & Rehabilitation*, 16(2_suppl), S17–S18. <https://doi.org/10.1097/01.hjr.0000359230.73270.2e>
- ²¹⁷ Janssen, I. (2012). Healthcare costs of physical inactivity in Canadian adults. *Applied Physiology, Nutrition, and Metabolism*, 37(4), 803–806. <https://doi.org/10.1139/h2012-061>
- ²¹⁸ Celis-Morales, C. A., Lyall, D. M., Welsh, P., Anderson, J., Steell, L., Guo, Y., Maldonado, R., Mackay, D. F., Pell, J. P., Sattar, N., & Gill, J. M. R. (2017). Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ*, 357, j1456. <https://doi.org/10.1136/bmj.j1456>
- ²¹⁹ Tammelin, T., Näyhä, S., Hills, A. P., & Järvelin, M.-R. (2003). Adolescent participation in sports and adult physical activity. *American Journal of Preventive Medicine*, 24(1), 22–28. [https://doi.org/10.1016/s0749-3797\(02\)00575-5](https://doi.org/10.1016/s0749-3797(02)00575-5)

-
- ²²⁰ Pollack, K. M., Kercher, C., Frattaroli, S., Peek-Asa, C., Sleet, D., & Rivara, F. P. (2012). Toward environments and policies that promote injury-free active living—it wouldn't hurt. *Health and Place*, 18(1), 106–114. <https://doi.org/10.1016/j.healthplace.2011.07.010>
- ²²¹ Mutrie, N. (2000). The relationship between physical activity and clinically defined depression. In S. J. H. Biddle, K. R. Fox, & S. H. Boutcher (Eds.), *Physical activity and psychological well-being*. (pp. 46–62). Routledge.
- ²²² Statistics Canada. (2019, May 21). Sports for fun and fitness. <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2019039-eng.htm>
- ²²³ Scully, D., Kremer, J., Meade, M. M., Graham, R., & Dudgeon, K. (1998). Physical exercise and psychological well being: A critical review. *British Journal of Sports Medicine*, 32(2), 111–120. <https://doi.org/10.1136/bjism.32.2.111>
- ²²⁴ Department of Health, Physical Activity, Health Improvement and Protection. (2011, July). Start active, stay active: A report on physical activity from the four home countries' Chief Medical Officers. The Department of Health. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/830943/withdrawn_dh_128210.pdf
- ²²⁵ Sebire, S. J., Standage, M., & Vansteenkiste, M. (2009). Examining intrinsic versus extrinsic exercise goals: Cognitive, affective, and behavioural outcomes. *Journal of Sport & Exercise Psychology*, 31(2), 189–210. <https://doi.org/10.1123/jsep.31.2.189>
- ²²⁶ Delaney, L., & Keaney, E. (2005). Sport and social capital in the United Kingdom: Statistical evidence from national and international survey data. Dublin: Economic and Social Research Institute and Institute for Public Policy Research, 32, 1-32.
- ²²⁷ Totten, M. (2007). Access to recreation for low-income families in Ontario: The health, social and economic benefits of increasing access to recreation for low-income families. Ministry of Health Promotion.
- ²²⁸ Haugen, T., Säfvenbom, R., & Ommundsen, Y. (2011). Physical activity and global self-worth: The role of physical self-esteem indices and gender. *Mental Health and Physical Activity*, 4(2), 49–56. <https://doi.org/10.1016/j.mhpa.2011.07.001>
- ²²⁹ Lullo, C., & Van Puymbroeck, M. (2006). Research update: Sports for children with ADHD. *Parks & Recreation*, 41(12), 20–24.
- ²³⁰ National Recreation and Park Association. (n.d.). *Synopsis of 2010 research papers: The key benefits*. https://www.nrpa.org/uploadedFiles/nrpa.org/Publications_and_Research/Research/Papers/Synopsis-of-Research-Papers.pdf
- ²³¹ Lawlor, D. A., & Hopker, S. W. (2001). The effectiveness of exercise as an intervention in the management of depression: Systematic review and meta-regression analysis of randomised controlled trials. *BMJ*, 322(7289), 763–763. <https://doi.org/10.1136/bmj.322.7289.763>
- ²³² Fox, K. R. (2000). Self-esteem, self-perceptions, and exercise. *International Journal of Sport Psychology*, 31(2), 228–240.
- ²³³ Chodzko-Zajko, W. J. (1998). Physical activity and aging: implications for health and quality of life in older persons. President's Council on Physical Fitness and Sports Research Digest, Series 3 n4.
- ²³⁴ Taub, D. E., & Greer, K. R. (2000). Physical activity as a normalizing experience for school-age children with physical disabilities: Implications for legitimization of social identity and enhancement of social ties. *Journal of Sport & Social Issues*, 24(4), 395–414. <https://doi.org/10.1177/0193723500244007>
- ²³⁵ Shanahan, D. F., Bush, R., Gaston, K. J., Lin, B. B., Dean, J., Barber, E., & Fuller, R. A. (2016). Health benefits from nature experiences depend on dose. *Scientific Reports*, 6(1), 28551. <https://doi.org/10.1038/srep28551>
- ²³⁶ Burnett, C. (2016). Building social capital through an 'Active Community Club'. *International Review for the Sociology of Sport*, 41(3-4), 283–294. <https://doi.org/10.1177/1012690207078381>
- Also: Smith, A. L. (2003). Peer relationships in physical activity contexts: A road less traveled in youth sport and exercise psychology research. *Psychology of Sport and Exercise*, 4(1), 25–39. [https://doi.org/10.1016/s1469-0292\(02\)00015-8](https://doi.org/10.1016/s1469-0292(02)00015-8)
- ²³⁷ Ernst & Young, & espnW. (2015). Where will you find your next leader? EY and espnW explore how sport advances women at every level. <https://wnywomensfoundation.org/app/uploads/2017/11/76.-Where-will-you-find-your-next-leader.pdf>
- ²³⁸ Ahn, S., & Fedewa, A. L. (2011). A meta-analysis of the relationship between children's physical activity and mental health. *Journal of Pediatric Psychology*, 36(4), 385–397. <https://doi.org/10.1093/jpepsy/jsq107>
- Lees, C., & Hopkins, J. (2013). Effect of aerobic exercise on cognition, academic achievement, and psychosocial function in children: A systematic review of randomized control trials. *Preventing Chronic Disease*, 10, E174. <https://doi.org/10.5888/pcd10.130010>

- Lindner, K. J. (1999). Sport participation and perceived academic performance of school children and youth. *Pediatric Exercise Science*, 11(2), 129–143. <https://doi.org/10.1123/pes.11.2.129>
- Muñoz-Bullón, F., Sanchez-Bueno, M. J., & Vos-Saz, A. (2017). The influence of sports participation on academic performance among students in higher education. *Sport Management Review*, 20(4), 365–378. <https://doi.org/10.1016/j.smr.2016.10.006>
- Singh, A., Uijtdeuwilgen, L., Twisk, J. W. R., Van Mechelen, W., & Chinapaw, M. J. M. (2012). Physical activity and performance at school: A systematic review of the literature including a methodological quality assessment. *Archives of Pediatrics & Adolescent Medicine*, 166(1), 49–55. <https://doi.org/10.1001/archpediatrics.2011.716>
- Strong, W. B., Malina, R. M., Blimkie, C. J., Daniels, S. R., Dishman, R. K., Gutin, B., Hergenroeder, A. C., Must, A., Nixon, P. A., Pivarnik, J. M., Rowland, T., Trost, S., & Trudeau, F. (2005). Evidence based physical activity for school-age youth. *The Journal of Pediatrics*, 146(6), 732–737. <https://doi.org/10.1016/j.jpeds.2005.01.055>
- ²³⁹ It is important to note that the research exploring the link between physical activity and academic performance remains early stage.
- ²⁴⁰ Singh, A., Uijtdeuwilgen, L., Twisk, J. W. R., Van Mechelen, W., & Chinapaw, M. J. M. (2012). Physical activity and performance at school: A systematic review of the literature including a methodological quality assessment. *Archives of Pediatrics & Adolescent Medicine*, 166(1), 49–55. <https://doi.org/10.1001/archpediatrics.2011.716>
- ²⁴¹ *Everybody Active Every Day. An Evidence-based Approach to Physical Activity.* (2014). Public Health England. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/374914/Framework_13.pdf
- ²⁴² Parks and Recreation Ontario, HIGH FIVE, & Resiliency Initiatives. (2014, November). *Resiliency and recreation: Summary report.* <https://www.highfive.org/sites/default/files/Resiliency%20and%20Recreation%20Summary%20Report-Nov%202014.pdf>
- ²⁴³ Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy. *Health & Place*, 14(2), 198–208. <https://doi.org/10.1016/j.healthplace.2007.06.001>
- ²⁴⁴ Leyden, K. M. (2003). Social capital and the built environment: The importance of walkable neighbourhoods. *American Journal of Public Health* (1971), 93(9), 1546–1551. <https://doi.org/10.2105/ajph.93.9.1546>
- ²⁴⁵ Maller, C. J., Townsend, M., St. Leger, L., Henderson-Wilson, C., Pryor, A., Prosser, L., & Moore, M. (2008) Healthy parks healthy people: The health benefits of contact with nature in a park context. *Parks Stewardship Forum* 26(2).
- ²⁴⁶ Armstrong, D. (2000). A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health & Place*, 6(4), 319–327. [https://doi.org/10.1016/s1353-8292\(00\)00013-7](https://doi.org/10.1016/s1353-8292(00)00013-7)
- ²⁴⁷ Edwards, M. (2015). The role of sport in community capacity building: An examination of sport for development research and practice. *Sport Management Review*, 18(1), 6–19. <https://doi.org/10.1016/j.smr.2013.08.008>
- Taylor, P., Davies, L., Wells, P., Gilbertson, J., & Tayleur, W. (2015, March). A review of the social impacts of culture and sport. *The Culture and Sport Evidence.* https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/416279/A_review_of_the_Social_Impacts_of_Culture_and_Sport.pdf
- ²⁴⁸ Delaney, L., & Keaney, E. (2005). Sport and social capital in the United Kingdom: Statistical evidence from national and international survey data. Department of Culture, Media and Sport. https://d1wqtxts1xzle7.cloudfront.net/6750301/sport_and_social_capital.pdf?response-content-disposition=inline%3B+filename%3DSport_and_Social_Capital_in_the_United_K.pdf&Expires=1596833266&Signature=en9Iaa5adEdSN1upoVLH0Vd8cft5MfYC6MH2cKVBdvvhWwBvE34X3xB4heFpS3-UWYOvWTS02XOT3c7~Uc2Fy6Xkl~lac0oCvQm66V24sXyoY~hpjaKOOxcdt2HZoL80sZI9UDbb2GsdBsFTY8issVBUwSoDPSWf75WqKMq3JFsv3qIO825GOz5eWMvGS1UWbTalPdH~FASR1gOYppkeNW8hstbSx5N~O7ghSxqL5iwnHm59mJe65JG01ophBct887x7o7qMnMiQQoFdLn-L6cNzsLZplAyFeRwepbrqkCLRsScTk2Wj9rtjUBKO7f9FMbofQxIgfCCgXnx2bgw__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- ²⁴⁹ Spaaij, R. (2012). Beyond the playing field: Experiences of sport, social capital, and integration among Somalis in Australia. *Ethnic and Racial Studies*, 35(9), 1519–1538. <https://doi.org/10.1080/01419870.2011.592205>
- ²⁵⁰ Bradbury, S., & Kay, T. (2008). Stepping into community? The impact of youth sport volunteering on young people's social capital. In M. Nicholson & R. Hoye (Eds.) *Sport and social capital* (pp. 285–315). Elsevier Science & Technology.
- ²⁵¹ Eley, D., & Kirk, D. (2010). Developing citizenship through sport: The impact of a sport-based volunteer programme on young sport leaders. *Sport, Education and Society*, 7(2), 151–166. <https://doi.org/10.1080/1357332022000018841>

²⁵² Estimated based on author analysis. Imagine Canada reports that an estimated 21 per cent of all volunteering is associated with sport and recreation and nine per cent for health. Imagine Canada also reports a total of ten per cent of all volunteer hours (aged 15 and older) are associated with sport, recreation, and health. The average hours reported by Imagine Canada volunteered for sport & recreation is 133 hours. Refer to Imagine Canada report for additional details:

Gumulka, G., Barr, C., Lasby, D., & Brownlee, B. (2005). Understanding the capacity of sports and recreation organizations: A synthesis of findings from the National Survey of Nonprofit and Voluntary Organizations and the National Survey of Giving, Volunteering and Participating. Imagine Canada.

http://sectorsource.ca/sites/default/files/resources/files/understanding_capacity_of_sports_rec_report.pdf

²⁵³ Imagine Canada report for additional details: Gumulka, G., Barr, C., Lasby, D., & Brownlee, B. (2005). Understanding the capacity of sports and recreation organizations: A synthesis of findings from the National Survey of Nonprofit and Voluntary Organizations and the National Survey of Giving, Volunteering and Participating. Imagine Canada.

http://sectorsource.ca/sites/default/files/resources/files/understanding_capacity_of_sports_rec_report.pdf

²⁵⁴ Jamieson, L. M., & Ross, C. M. (2007). Research update: Using recreation to curb extremism. *Parks & Recreation*, 42(2), 26.

²⁵⁵ Hawkins, B. (1998). Evening basketball leagues: The use of sport to reduce African American youth criminal activity. *International Sports Journal*, 2(2), 68-77. Also see Kennedy, Kostya and O'Brien, Richard (1996). Round midnight. *Sports Illustrated*. August. Vol. 85. No. 8. For additional reading, refer to Planet Youth available at: <https://planetyouth.org/the-method/>

²⁵⁶ The Trust for Public Land. (1995). Healing America's cities: Why the project team must invest in urban parks.

<http://www.lib.niu.edu/1995/ip950121.html>

²⁵⁷ Vibar-Bawzon, J. (1997, October). Developing sports as a social deterrent to social deviance: The role of sport on women and girl's lives. In Presentation at the Second Scientific International Conference for Women Sport, Alexandria University, Egypt.

²⁵⁸ Sport England (1999). The value of sport. Published by Sport England. June.

²⁵⁹ Institute of Leisure and Amenity Management (ILAM) (1999) The Contribution of the Arts and Sport to Neighbourhood Renewal and Reducing Social Inclusion, ILAM, Reading.

²⁶⁰ *National Recreation and Park Association. (n.d.). Synopsis of 2010 research papers: The key benefits.*

https://www.nrpa.org/uploadedFiles/nrpa.org/Publications_and_Research/Research/Papers/Synopsis-of-Research-Papers.pdf

²⁶¹ Harnik, P., & Welle, B. (2011) From fitness zones to the medical mile: How urban park systems can best promote health and wellness. The Trust for Public Land. <https://www.tpl.org/sites/default/files/cloud.tpl.org/pubs/ccpe-health-promoting-parks-rpt.pdf>

²⁶² Alexander, C., & McDonald, C. (2014, June 9). Urban forests: The value of trees in the City of Toronto. TD Economics.

<https://www.td.com/document/PDF/economics/special/UrbanForests.pdf>

²⁶³ Briceno, T., & Schundler, G. (2015). Economic analysis of outdoor recreation in Washington State. Earth Economics.

<https://www.tre.wa.gov/wp-content/uploads/Willhite.pdf>

²⁶⁴ Elmqvist, T., Setälä, H., Handel, S. N., Van der Ploeg, S., Aronson, J., Blignaut, J. N., Gómez-Baggethun, E., Nowak, D. J., Kronenberg, J., & De Groot, R. (2015). Benefits of restoring ecosystem services in urban areas. *Current Opinion in Environmental Sustainability*, 14, 101-108. <https://doi.org/10.1016/j.cosust.2015.05.001>

²⁶⁵ Sorensen, M., Smit, J., Barzetti, V., & Williams, J. (1997). Good practices for urban greening. Inter-American Development Bank. <https://publications.iadb.org/publications/english/document/Good-Practices-for-Urban-Greening.pdf>

²⁶⁶ Ewing, R., & Greene, W. (2003.) Travel and environmental implications of school siting. U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2014-04/documents/school_travel.pdf

²⁶⁷ Staunton, C. E., Hubsmith, D., & Kallins, W. (2003). Promoting safe walking and biking to school: The Marin County success story. *American Journal of Public Health*, 93(9), 1431-1434. <https://doi.org/10.2105/AJPH.93.9.1431>

²⁶⁸ Groth, P., Miller, R., Nadkarni, N., Riley, R., & Shoup, L. (n.d.). Quantifying the greenhouse gas benefits of urban parks. *The Trust for Public Land*. https://www.tpl.org/sites/default/files/files_upload/TPL_Quantifying%20the%20GHG%20benefits%20of%20urban%20parks_lores.pdf

²⁶⁹ Frank, L. D., Sallis, J. F., Conway, T. L., Chapman, J. E., Saelens, B. E., & Bachman, W. (2006). Many pathways from land use to health: Associations between neighbourhood walkability and active transportation, body mass index, and air quality. *Journal of the American Planning Association*, 72(1), 75-87. <https://doi.org/10.1080/01944360608976725>

SECTION 7

²⁷⁰ For additional information on the 15-minute city refer to <https://www.theglobeandmail.com/canada/article-bikes-pedestrians-and-the-15-minute-city-how-the-pandemic-is/>

²⁷¹ Systems thinking has a long history in academia. For further information, see the fascinating TED Talk by Eric Berlow on Simplifying complexity:

Berlow, E. (2010, July). Simplifying complexity [Video]. TED Conferences. https://www.ted.com/talks/eric_berlow_simplifying_complexity?language=en

Or the article: Sargent, G., & McGrath, R. G. (2011, September). Learning to live with complexity. *Harvard Business Review*, 89(9), 68-76. <https://hbr.org/2011/09/learning-to-live-with-complexity>

In the Calgary context we encourage you to review the Resilient Calgary Strategy for an exceptional analysis of the stresses, shocks, challenges and opportunities facing Calgary. This report is available at: <https://www.calgary.ca/cs/calgary-resilience.html?redirect=/resilientcalgary>

²⁷² Survey was taken prior to the COVID-19 pandemic. Canadian trust barometer study is located at: *Edelman. (2020). Edelman trust barometer 2020.* <https://www.edelman.ca/sites/g/files/aatuss376/files/2020-02/2020%20Edelman%20Trust%20Barometer%20Canada%20-%20FINAL%20%281%29.pdf>

²⁷³ Calgary Foundation. (2019). Calgary's Vital Signs. <https://prod-vital-signs.s3.ca-central-1.amazonaws.com/2019/Vital-Signs-Report-2019-ver2.pdf>

²⁷⁴ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf

²⁷⁵ Canadian Women & Sport. (2020, June). The rally report: Encouraging action to improve sport for women and girls. https://womenandsport.ca/wp-content/uploads/2020/06/Canadian-Women-Sport_The-Rally-Report.pdf

²⁷⁶ Denison, E., & Kitchen, A. (2015). Out on the fields: The first international study on homophobia in sport. <http://www.outonthefields.com/wp-content/uploads/2016/04/Out-on-the-Fields-Final-Report.pdf>

²⁷⁷ Birch-Jones, J. (2017) Leading the way. Working with LGBTQ athletes and coaches. Canadian Association for the Advancement of Women and Sport and Physical Activity. https://coach.ca/sites/default/files/2020-02/LeadingTheWay_v2017.pdf

²⁷⁸ The ActiveCITY Collective would like to thank Tyler White, the Chief Executive Officer - Siksika Health Services / President - First Nations Health Consortium for his contribution in authoring the sections associated with indigenous communities.

²⁷⁹ Bouaziz, W., Lang, P. O., Schmitt, E., Kaltenbach, G., Geny, B., & Vogel, T. (2016). Health benefits of multi-component training programmes in seniors: A systematic review. *International Journal of Clinical Practice (Esher)*, 70(7), 520-536. <https://doi.org/10.1111/ijcp.12822>

²⁸⁰ Copeland, J. L., Clarke, J., & Dogra, S. (2015). Objectively measured and self-reported sedentary time in older Canadians. *Preventive Medicine Reports*, 2(C), 90-95. <https://doi.org/10.1016/j.pmedr.2015.01.003>

²⁸¹ Colley, R. C., Garriguet, D., Janssen, I., Craig, C. L., Clarke, J., & Tremblay, M. S. (2011). Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. *Health Reports / Statistics Canada, Canadian Centre for Health Information = Rapports Sur La Santé / Statistique Canada, Centre Canadien D'information Sur La Santé*, 22(1), 7-14.

²⁸² *City of Burlington. (2017). Active Aging Plan.* https://www.burlington.ca/en/services-for-you/resources/Initiative%20Projects/Active-Aging-Plan/17-515-PAR_Active_Aging_Plan_UPDATE_2017-08-08-ACCESSIBILITY-FINAL-s.pdf

²⁸³ For more information, see Noland, M., & Moran, T. (2016, February 8). Study: Firms with more women in the c-suite are more profitable. *Harvard Business Review*. <https://hbr.org/2016/02/study-firms-with-more-women-in-the-c-suite-are-more-profitable>

²⁸⁴ Moyser, M. (2017, March 9). Women and paid work. *Statistics Canada*. <http://www.statcan.gc.ca/pub/89-503-x/2015001/article/14694-eng.htm>

Soloman, I. (2017, March 8). StatsCan on gender pay gap: Women earn 87¢ to men's \$1. *CBC*. <http://www.cbc.ca/news/business/statistics-canada-gender-pay-gap-1.4014954>

²⁸⁵ Please see the Organisation for Economic Co-operation and Development (OECD) study on Closing the Gender Gap available at: Organisation for Economic Co-operation and Development. (n.d.). Closing the gender gap. <https://www.oecd.org/canada/Closing%20The%20Gender%20Gap%20-%20Canada%20FINAL.pdf>

Also, please see: the Visier Insights Gender equity report:

Visier. (n.d.). Visier Insights report: Gender equity. <https://www.visier.com/wp-content/uploads/2016/06/Visier-Insights-Report-Gender-Equity.pdf>

²⁸⁶ Mirvis, P., & Googins, B. (2017) *The new business of business: Innovating for a better world*. The Conference Board. <https://www.conference-board.org/retrievefile.cfm?filename=TCB-GT-V2N1-The-New-Business-of-Business1.pdf&type=subsite>

For more information refer to: KPMG, SiG, & Volans with the support of the MaRS Discovery District. (2014). Breaking through: How corporate social innovation creates business opportunity. <https://socialinnovationinstitute.app.box.com/s/cy1nj4iocqsgdf74eskm>

²⁸⁷ Fischer, M. (2020, June 15). Commentary: Canadian universities rely on foreign students. What if China called its students home? Global News. <https://globalnews.ca/news/7057654/china-students-canada/>

²⁸⁸ Gilligan, M. (2020, June 5). Alberta's unemployment rate spiked to 15.5 per cent in May, remains among highest in Canada. Global News. <https://globalnews.ca/news/7030279/alberta-unemployment-rate-may-2020/>

²⁸⁹ Jackman, F., Way, R. (2020, June). Impacts of COVID-19 on local sports organizations: Nationwide survey results. Sport for Life. <https://sportforlife.ca/wp-content/uploads/2020/06/National-Report-Impacts-of-COVID-19-on-Local-Sports-Organizations-1.pdf>

²⁹⁰ The Canadian Press. (2020, June 12). Caution abounds as Alberta eases huge raft of COVID-19 restrictions. CBC. <https://www.cbc.ca/news/canada/calgary/alberta-eases-huge-raft-of-covid-19-restrictions-1.5609308>

²⁹¹ Conference Board of Canada. (2020, May 12). Major city insights: Pandemic reshapes economic picture for Canadian cities - Calgary. <https://www.conferenceboard.ca/focus-areas/canadian-economics/major-city-insights/calgary>

²⁹² Nassar, H. M. (2020, June 16). Sales low despite half of Canadian small businesses reopening: CFIB. CityNews. <https://edmonton.citynews.ca/2020/06/16/sales-low-canadian-small-businesses/>

²⁹³ For further analysis of the emerging impact of COVID-19 on the Experience Economy refer to:

Finch, D.J., Leduc, R., Legg, D., Levallet, N., O'Reilly, N., Pon, P., Raby, S., & Stone, M. (2020, June). The future of the live experience economy: Exploring the impact of COVID-19 on Calgary's live experience economy. <https://www.activecityproject.org/s/Future-of-Calgarys-Live-Experience-Economy-FINAL-625.pdf>

²⁹⁴ Statistics Canada. (2019). Sustainable development. <https://www.nrcan.gc.ca/nrcan/transparency/reporting-accountability/plans-performance-reports/sustainable-development/203>

²⁹⁵ Keough, N., Morrison, B., & Lee, C. (2020, May 27). State of our city 2020: An urgent call for a just transition. Sustainable Calgary. https://static1.squarespace.com/static/5ab716b9ee1759b04ca2703e/t/5ecd551002f4af1d18d76785/1590514966826/SustainableCalgary_SOOC2020.pdf

²⁹⁶ Glaeser, E. L., & Gottlieb, J. D. (2006). Urban resurgence and the consumer city (Discussion paper number 2109). Harvard Institute of Economic Research. <https://faculty.arts.ubc.ca/jgottlieb/papers/UrbanResurgenceConsumerCity2006HIER.pdf>

²⁹⁷ World Economic Forum (2020). Jobs of Tomorrow Mapping Opportunity in the New Economy. Retrieved from http://www3.weforum.org/docs/WEF_Jobs_of_Tomorrow_2020.pdf

²⁹⁸ For more information on the evolving nature of talent and its impact on Calgary, refer to the Calgary on the Precipice Reports at LearningCITY.ca

²⁹⁹ World Economic Forum (2018). Future of jobs report. Retrieved from <https://www.weforum.org/reports/the-future-of-jobs-report-2018>

³⁰⁰ Calgary Economic Development (2019b). Calgary in the New Economy. Retrieved from <https://calgaryeconomicdevelopment.com/the-new-economy/>

³⁰¹ Right Management (N.D.) Flux and the future. Counting the cost of five years of change. Retrieved from <https://www.hrreview.co.uk/wp-content/uploads/Right-Management-Infographic-The-Flux-Report.png>

-
- ³⁰² Lindzon, J. (2016, August 23). *Freelance work expanding to more sectors, report finds*. *The Globe and Mail*. <https://www.theglobeandmail.com/report-on-business/careers/career-advice/life-at-work/freelance-work-expanding-to-more-sectors-report-finds/article31519391/>
- ³⁰³ Krashinsky, S. (2016, September 9). *Specialized freelancers shaking up the traditional advertising business model*. *The Globe and Mail*. <https://www.theglobeandmail.com/report-on-business/industry-news/marketing/specialized-freelancers-shaking-up-the-traditional-advertising-business-model/article31777643/>
- ³⁰⁴ Dishman, L. (2017, January 5). *How the gig economy will change in 2017*. *Fast Company*. <https://www.fastcompany.com/3066905/how-the-gig-economy-will-change-in-2017>
- ³⁰⁵ World Economic Forum. (2018). *The future of jobs report 2018*. http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf
- ³⁰⁶ Statista Digital Market Outlook (Canada); 2018; Individuals of any age who own at least one smartphone and use the smartphone(s) at least once per month. <https://www.statista.com/outlook/200/108/digital-media/canada#market-revenue>
- ³⁰⁷ Rideout, V. J., & Robb, M. B. (2019). *The commonsense census: Media use by tweens and teens*. Common Sense Media. <https://www.common Sense Media.org/sites/default/files/uploads/research/2019-census-8-to-18-full-report-updated.pdf>
- ³⁰⁸ Ericsson. (2016, November 16). *5G subscriptions to reach half a billion in 2022: Ericsson Mobility report* [Press release]. <http://mb.cision.com/Main/15448/2243795/660363.pdf>
- ³⁰⁹ For more information on the New York Times and VR see:
Hanlon, P. (2016, November 1). 'The New York Times' launches daily 360 VR news. *Forbes*. <https://www.forbes.com/sites/patrickhanlon/2016/11/01/the-new-york-times-launches-daily-360-vr-news/#242e8f36226d>
- ³¹⁰ Merwin, C. D., Sugiyama, M., Mubayi, P., Hari, T., Terry, H. P., & Duval, A. (2018, October 12). *The world of games eSports: From wild west to mainstream*. Goldman Sachs. <https://www.goldmansachs.com/insights/pages/infographics/e-sports/report.pdf>
- ³¹¹ Newzoo. (2019). *Global eSport Market Report*. Retrieved from <https://newzoo.com/insights/trend-reports/newzoo-global-esports-market-report-2019-light-version/fromhttps://en.oxforddictionaries.com/definition/e-sport> For additional reading on eSports refer to:
- Finch, D. J., O'Reilly, N., Abeza, G., Clark, B., & Legg, D, (2019). *Implications and Impacts of eSports on Business and Society: Emerging Research and Opportunities: Emerging Research and Opportunities*. IGI Global.
- ³¹² Box Office Mojo. (2019). *All time box office: Worldwide openings*. Retrieved April 19, from <https://www.boxofficemojo.com/alltime/world/worldwideopenings.htm>
- ³¹³ Refer to: <https://www.mckinsey.com/features/mckinsey-center-for-future-mobility/overview/autonomous-driving>
- ³¹⁴ For additional information on autonomous vehicle forecasts refer to: Garret, O. (2017, March 3). *ten million self-driving cars will hit the road by 2020 -- Here's how to profit*. *Forbes*. <https://www.forbes.com/sites/oliviergarret/2017/03/03/10-million-self-driving-cars-will-hit-the-road-by-2020-heres-how-to-profit/#5722d7317e50>
- ³¹⁵ *The Kids & Family Reading Report, Canadian Edition* (2017). <http://www.scholastic.ca/readingreport/about.php>
- ³¹⁶ Kollewe, J. (2017, May 2). *Google and Facebook bring in one-fifth of global ad revenue*. *The Guardian*. <https://www.theguardian.com/media/2017/may/02/google-and-facebook-bring-in-one-fifth-of-global-ad-revenue>
- ³¹⁷ Rody, B. (2018). *Big sports fans are big TV consumers: study*. <https://mediaincanada.com/2018/10/12/big-sports-fans-are-big-tv-consumers-study/>
- ³¹⁸ Delacourt, S. (2017, February 7). *Facebook nation: Social media titan now dominates Canadian news*. *iPolitics*. <http://ipolitics.ca/2017/02/07/facebook-nation-social-media-titan-now-dominates-canadian-news/>
- ³¹⁹ Wulf, T., Schneider, F. M., & Beckert, S. (2018). *Watching players: An exploration of media enjoyment on Twitch*. *Games and Culture*, 15(3), 155541201878816–346. <https://doi.org/10.1177/1555412018788161>
- ³²⁰ Iqbal, M. (2019). *Twitch revenue and usage statistics*. *Business of Apps*. Retrieved from <http://www.businessofapps.com/data/twitch-statistics/>
- ³²¹ Taylor, H. (2018, February 14). *Twitch surpasses CNN and MSNBC with record-breaking viewership*. *gamesindustry.biz*. Retrieved from <https://www.gamesindustry.biz/articles/2018-02-14-twitch-surpasses-cnn-and-msnbc-with-record-breaking-viewership>

SECTION 8

³²² Refer to:

- City of Lahti. (n.d.) Town planning for sustainable transport. <https://www.lahti.fi/en/city-and-decision-making/lahti-direction/>
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 54. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf
- Bristol City Council. (2019). *Bristol transport strategy: Tackling congestion and making Bristol a better place for all. A vision up to 2036*. <https://www.bristol.gov.uk/documents/20182/3641895/Bristol+Transport+Strategy+-+adopted+2019.pdf/383a996e-2219-dbbb-dc75-3a270bfce26c>
- Bristol City Council. (n.d.). *Cycling*. <https://www.bristol.gov.uk/streets-travel/cycling>
- NYC Department of Education. (2020). *Equity and excellence for all*. <https://www.schools.nyc.gov/about-us/vision-and-mission/equity-and-excellence>
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 42. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf
- Citi Bike. (2020). Citi Bike. <https://www.citibikenyc.com/>
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 20. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf
- Bliss, L. (2017, May 22). Is Montreal still North America's cycling capital? *Bloomberg CityLab*. <https://www.bloomberg.com/news/articles/2017-05-22/is-montreal-still-north-america-s-top-cycling-city>
- Walker, P. (2015, June 17). People power: The secret to Montreal's success as a bike-friendly city. <https://www.theguardian.com/cities/2015/jun/17/people-power-montreal-north-america-cycle-city>
- Bixi Montreal. (n.d.) We are Bixi Montreal. <https://bixi.com/en/who-we-are>
- [http://ville.montreal.qc.ca/pls/portal/docs/PAGE/TRANSPORTS_FR/MEDIA/DOCUMENTS/TRANSPORTATION per cent 20PLAN per cent 202008_COM.PDF](http://ville.montreal.qc.ca/pls/portal/docs/PAGE/TRANSPORTS_FR/MEDIA/DOCUMENTS/TRANSPORTATION_per_cent_20PLAN_per_cent_202008_COM.PDF)
- City of Montreal. (2016). *Result of the study on the state of cycling in Montreal in 2015: Over a million cyclists in Montreal*. http://ville.montreal.qc.ca/portal/page?_pageid=5798,42657625&_dad=portal&_schema=PORTAL&id=27158&ret=http://ville.montreal.qc.ca/pls/portal/url/page/prt_vdm_fr/rep_annonces_ville/rep_communiqués/communiqués
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 33. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf
- Cushing, M., Hooshmand, J., Pomares, B., & Hotz, G. (2016). Vision Zero in the United States Versus Sweden: Infrastructure Improvement for Cycling Safety. *American Journal of Public Health*, 106(12), 2178–2180. https://login.libproxy.mtroyal.ca/login?url=https://search.proquest.com/docview/1853264034?accountid=1343&rfr_id=info%3Axi%2Fsid%3Aprimo
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 40. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf
- Physical Activity Through Sustainable Transport Approaches. (n.d.). *Facts on active mobility: Zurich / Switzerland*. https://pastaproject.eu/fileadmin/editor-upload/sitecontent/Publications/documents/AM_Factsheet_Zurich_WP2.pdf
- RailwayTechnology. (n.d.). Zurich Durchmesserlinie Project. https://www.railway-technology.com/projects/zurich_capacity/
- The Aspen Institute. (2018). State of play Harlem: Analysis and recommendations. <https://www.aspeninstitute.org/publications/state-play-harlem/>
- City of Burlington. (2017). *Active Aging Plan*. https://www.burlington.ca/en/services-for-you/resources/Initiative%20Projects/Active-Aging-Plan/17-515-PAR_Active_Aging_Plan_UPDATE_2017-08-08-ACCESSIBILITY-FINAL-s.pdf
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 46. https://participatoryplanning.ca/sites/default/files/upload/document/tool/designed_to_move_.pdf

-
- City of Copenhagen. (2016). *Copenhagen city of cyclists: The bicycle account 2016*. <https://bicycleinfrastructuremanuals.com/manuals4/CPH%20bicycle-account-2016.pdf>
- Yuwa. (n.d.). About Yuwa. <https://yuwa-india.org/#about>
- Waghule, P. (2013, August 2). How football can change lives: Jharkhan representing Yuwa India show the way. *DNA*. <https://www.dnaindia.com/sports/report-how-football-can-change-lives-jharkhand-girls-representing-yuwa-india-show-the-way-1868908>
- Sarmah, B. (2017, November 4). Football a life-changer for these young Jharkhand girls. *Hindustan Times*. <https://www.hindustantimes.com/football/jharkhand-ngo-yuwa-expanding-horizons-of-young-girls-through-football/story-0PU6a1YE7YqWH74OBPCnM.html>
- Nayar, A. (2016, July 15). These school girls from Jharkhand put their remote village up on Wikipedia. *Huffington Post*. https://www.huffingtonpost.in/2015/09/11/yuwa-hutup-wikipedia_n_8120508.html
- ukactive. (2018). Reimagining ageing. <https://www.ukactive.com/reports/reimagining-ageing/>
- Nike. (2015). *A Guide for City Leaders: Designed to Move Active Cities*. P. 35. https://participatoryplanning.ca/sites/default/files/upload/document/tool/Designed_to_move_.pdf
- Downing, N. (2013). Moving Toward Completion: Barriers to Complete Streets Implementation in Metropolitan Boston. ProQuest Dissertations Publishing. <https://search-proquest-com.libproxy.mtroyal.ca/docview/1400268531?pq-origsite=summon>
- ukactive. (n.d.). Avelab 2019: The future of Fittech. <https://www.ukactive.com/avelab/>
- ukactive. (n.d.). *ActiveLab: The Current State of Fittech*. https://www.ukactive.com/wp-content/uploads/2019/03/ActiveLab_Report_The_Current_State_Of_FitTech_Web.pdf
- Ukactive. (n.d.). The fit-tech framework. https://www.ukactive.com/wp-content/uploads/2019/06/ActiveLab_Fit-Tech_Framework.pdf
- ³²²Refer to:
- Global News Morning. (2020, August 21). *The Calgary Adaptive Hub*. [Video]. Global News Video Player. <https://globalnews.ca/video/7290642/the-calgary-adaptive-hub>
- Russell, S. (2020, August). *Calgary's about to become an adaptive sport hub*. [Video]. CBC News Video Player <https://www.cbc.ca/player/play/1778669635714>
- Condon, O. (2020, August 20). Sport Calgary partners with MRU, Jumpstart, to bring inclusive play opportunities to children with disabilities. *Calgary Herald*. <https://calgaryherald.com/news/local-news/sport-calgary-partners-with-mru-jumpstart-to-bring-inclusive-play-opportunities-to-children-with-disabilities>
- Worden, Z. (2020, August 31). Adaptive Hub provides place from which to build strength: MRU joins forces to develop sport programming for those with disabilities. *Mount Royal University Media Room*. <https://www.mtroyal.ca/AboutMountRoyal/MediaRoom/Stories/adaptive-hub-provides-place-from-which-to-build-strength.htm>
- Daniels, J. & Van Kesteren, S. (personal communication, November 3, 2020). Discussion around the Shaw Charity Classic
- Copperfield School Administration. (personal communication, September 14, 2020). Discussion around the school's efforts.
- Parent Community Survey from February 2018 shows 43% of students walked, wheeled and/or biked to school. A survey done in February 2020 showed that 49.2% of students of students walked, wheeled, or biked to school. This is an increase of 6.2%.
- Calgary Foundation. (n.d.). Kidsport Calgary & Area. *Calgary Foundation's Community Knowledge Centre*. <https://ckc.calgaryfoundation.org/profile/kidsportcalgary/>
- Kidsport Calgary. (n.d.). COVID-19 Family Insights.
- Spirit North. (2020). *2019-2020 Community impact report*. <https://static1.squarespace.com/static/5e84ea4277b64d7a9fe76afd/t/5f68e49c839ebf5fdb825ac0/1600709794569/Spirit+North+2019-2020+CIR+%28Pages%29.pdf>
- Gar Gar. (personal communication, November 3, 2020). Discussion around the YYC Kids Ride initiative.
- Daniels, J., Washbrook, I. & Feeny, J. (personal communication, November 2, 2020). Discussion around the 10m diving platform at Repsol Sport Centre.

Stamile, B. (personal communication, September 9, 2020). Discussion around the Glenbrook Multisport Community Centre.

Play City. (n.d.). Welcome to PlayCity!. <https://www.playcityapp.com/>

Adrianmartinus. (n.d.). Home page. <https://adrianmartinus.com/>

Rieger, S. (2020, November 2). Calgaryans who built credenza of upcycled skateboards chosen by Drew Barrymore to win Etsy design award. *CBC*. <https://www.cbc.ca/news/canada/calgary/adrianmartinus-1.5785852>

Garmin. (n.d.). About. <https://www.garmin.com/en-US/company/about-garmin/>

Garmin. (n.d.). Social responsibility. [garmin.com/en-US/company/responsibility/](https://www.garmin.com/en-US/company/responsibility/)

Garmin. (n.d.). Home page. <https://www.garmin.com/en-CA/>

Garmin. (n.d.). Garmin blog: Fitness. <https://www.garmin.com/en-US/blog/category/fitness/>

Resorts of the Canadian Rockies. (n.d.). About Resorts of the Canadian Rockies. <https://skircr.com/about-rcr/>

Canadian Tire Jumpstart. (n.d.). Impact. <https://jumpstart.canadiantire.ca/pages/impact>

Canadian Tire. (n.d.). Community. <https://corp.canadiantire.ca/English/community/default.aspx>

Canadian Tire Jumpstart. (n.d.). Home page. <https://jumpstart.canadiantire.ca/>

Canadian Tire. (n.d.). About us. <https://corp.canadiantire.ca/English/about-us/default.aspx>

APPENDIX

³²⁴ The glossary is composed of standardized definitions from the various local and global sources indicated below. In areas where there were conflicting definitions, the project team deferred to the most recent definition adopted by the City of Calgary.

- Sport England. (2015, October). *Active Design: Planning For Health And Wellbeing Through Sport and Physical Activity*. Public Health England.
- The Ontario Government. (n.d.). Game ON – The Ontario Government’s Sport Plan: A Legacy Of The Pan Am/Parapan Am Games.
- Auckland Council. (2018, June). Auckland Plan 2050.
- Canadian Parks and Recreation Association/Interprovincial Sport and Recreation Council. (2015, February). *A Framework for Recreation in Canada - 2015 - Pathways to Wellbeing*. Ottawa: Canadian Recreation and Parks Association.
- The City of Calgary Recreation. (2010). *Recreation Master Plan: 2010-2020*.
- The City of Calgary. (2011, March). *Calgary Community GHG Reduction Plan: Energy In The City*.
- The City of Calgary. (2009, September). *Calgary Transportation Plan*.
- The City of Calgary. (2009, September). *Municipal Development Plan*.
- The City of Calgary Parks. (2003, March). *Open Space Plan*.
- The City of Calgary. (2011, June). *Cycling Strategy*.
- The City of Calgary Transportation Department. (2016, August). *Step Forward: A Strategic Plan For Improving Walking In Calgary*.
- The City of Calgary. (2020). *Calgary and Region Economic Outlook: 2020-2025*.
- The City of Calgary Recreation. (2018, May 28). *Sport For Life Policy*.

³²⁵ King, Huseynli, & MacGibbon, 2018

³²⁶ For additional information on the 15-minute city refer to <https://www.theglobeandmail.com/canada/article-bikes-pedestrians-and-the-15-minute-city-how-the-pandemic-is/>

³²⁷ Refer to <https://www.physical-literacy.org.uk/>

³²⁸ The primary source used for City of Calgary built resources was the City of Calgary Parks wayfinder app: <https://maps.calgary.ca/ParksWayfinder/> The City of Calgary is conducting a review prior to the release of the final Playbook.

For private sector-built capital a manual count was conducted from publicly available data. An example, includes the number of chiropractic clinics is located at: <https://www.wcb.ab.ca/treatment-and-recovery/get-treatment/find-a-chiropractor.asp>

In some case, public domain information was not available, so the research team made estimates. For example, the project team assumed one gymnasium was located at each school.

³²⁹ Below is a summary of approach used at an activity or program level. Additional details are available upon request:

Personal training & Fitness Centre:

- Includes City of Calgary Recreation:
 - Fitness and Strength
 - Parent & Child and Pre/Postnatal Fitness
 - Fitness studios: Used F45 for class duration and schedule and extrapolated 30 classes per week over 50 weeks. Used City of Calgary average of 8.5 participants per class.

Martial Arts:

- Used Studios Group Martial Arts for class duration and schedule and extrapolated 40 classes per week over 50 weeks. Used City of Calgary average of 8.5 participants per class.

Yoga and/or Spin Studio

- Includes City of Calgary Recreation Yoga, Pilates & Wellness

Fitness studios

- Used Yoga Nova Studio for class duration and schedule and extrapolated 44 classes per week over 50 weeks. Used City of Calgary average of 8.8 participants per class.

CrossFit

- Used Chinook CrossFit for class duration and schedule and extrapolated 25 classes per week over 50 weeks. Used City of Calgary average of 8.8 participants per class.

Boxing

- Used Southpaw Boxing for class duration and schedule and extrapolated 11 classes per week over 50 weeks. Used City of Calgary average of 8.8 participants per class.

Dance

- Used Pulse Studios for class duration and schedule and extrapolated 21 classes per week over 50 weeks. Used City of Calgary average of 8.8 participants per class.

Kickbox Fitness

- Used 9Round Fitness for class duration and schedule and extrapolated 60 classes per week over 50 weeks. Used City of Calgary average of 8.8 participants per class.

Biking

- Pending WinSport program data.

Skiing

- Pending WinSport program data.

Hockey - Minor

- Hockey Calgary provided all participation data.

Hockey – Adult

- Relied mostly on <https://recsportsteam.com/blog/category/calgary/> for leagues in Calgary. Participation data based on pulling content from each league site. Assumed 20 players per team based on actual data from SCRHL. Assumed 60 mins per game.

Hockey – USports

- 2 Calgary varsity teams. Approximated participation time based on a conservative 3:1 practice to game time ratio (similar to minor soccer). Assumed 20 players per team based on actual data from SCRHL. Assumed 60 mins per game.

Soccer - Minor

- Calgary Minor Soccer Association provided participation data. Used ratio of three hours of practice and training to one-hour of game time per week

Soccer – Adult

- Relied on <https://recsportsteam.com/blog/category/calgary/> for leagues in Calgary. Participation data based on pulling content from each league site. Assumed 11 players per team. Assumed 90 mins per outdoor game plus 30 mins practice per game. Assumed 50 minutes per indoor game plus ten mins practice per game.

Football – Minor

- Relied on Peewee, Bantam and Spring league associations in Calgary for numbers.
- Pending Atom numbers.

Football – Flag – Youth

- Relied mostly on leagues found through <https://calgaryflag.ca/>

Football – Flag – Adult

- Relied mostly on leagues found through <https://calgaryflag.ca/>

Football - High School

- Relied on CSHSAA standings from 2018-19 to make assumptions.

Basketball – Minor

- Calgary Minor Basketball Association provided all participation data.

Basketball – School

- Pulled game data from Calgary Senior High School Athletic Association website. Assumed one-hours of practice for each 60-minute game.

Basketball – Recreational

- Relied on <https://recsportsteam.com/blog/category/calgary/> for leagues in Calgary. Participation data based on pulling content from each league site. Assumed five players per team. Assumed 60 mins per game.

Softball – Minor

- Relied on Calgary Minor Softball Association for team s and game info. Assumed # games per team based on website for 2019 season. Assumed ten players per team. Assumed 1-hour game time plus one-hour of practice per game.

Softball – Recreation

- Relied on <https://recsportsteam.com/blog/category/calgary/> for leagues in Calgary. Participation data based on pulling content from each league site. Assumed ten players per team. Assumed 90 mins per game.

Ringette

- Relied on Ringette Calgary website for team s and game info. Assumed 16 games per team based on website for 2019 season. Assumed 15 players per team based on website rosters. Assumed one-hour game time plus one-hour of practice per game.

Baseball

- Obtained estimate of participation hours from a program manager in Calgary. Used this estimate as a basis to apply to other teams throughout the city.

Skating

- Pending

Lacrosse

- Pending

Track and Field

- CALTAF offers programs which are detailed online. Completed estimate based on CALTAF program schedules. Key input is ten participants per program – estimated.
- High school does not show training times.

Field Hockey – Minor

- Relied on training programs offered on Alberta Field Hockey Association website links. Assumptions noted in backup.

Field Hockey – Leagues

- Relied on training programs offered on Alberta Field Hockey Association website links. Assumptions noted in backup.

Field Hockey - High School

- Relied on CSHSAA standings from 2018-19 to make assumptions.

Ball Hockey

- Used Superleagues archive to pull information for estimate. Did not include Western Recreational Ball Hockey league as now information was available.

Curling – Lessons

- Relied on programming from Calgary Curling Club. five programs offered twice per year. eight weeks at two-hours per week per program. ten clubs that could offer programs.

Curling – Recreational

- Relied on programming from Calgary Curling Club. Club ice is available approximately eight hours per day per sheet. Assume 6 sheets per club. Assume average of 80 per cent capacity. Club is open approximately six months, or 26 weeks.

Climbing

- Used Calgary Climbing Centre Chinook online program schedule. Approximated five programs, held ten times per year. Programs estimated to last six hours. Estimated eight participants per program.

Cheer

- Used Dynasty Cheer All-Stars online program schedule to estimate hours. Assumed ten participants per class.
- Found three non-school cheer clubs in Calgary CMA: <https://www.albertacheerleading.ca/find-a-team-18#!directory/map>

Parkour

- Based on Breath Parkour club. Estimated nine programs at 60 hours each. Estimated ten participants per program.

Netball

- Using Netball Alberta website, estimated hours of programming based on Fall/Winter and Spring leagues.

Baton

- Found eight clubs in the Calgary area listed on the Alberta Baton Twirling Association website:

<https://www.albertabaton.com/find-a-club.html>

- Used the program schedule for Centripetal Force & Idiom Expression Baton & Dance Co., and an average class size of ten participants to estimate participation.

Diving

- Used Rocky Mountain Dive Club program schedule to build estimate. Assumed programs will occur similarly in Fall, Winter and Spring seasons to build estimate. Assumed ten participants per class.

Dodgeball

- Used <https://recsportsteam.com/blog/category/calgary/> for leagues in Calgary. Participation data based on pulling content from each league site. Assumed ten players per team. Assumed 60 mins per game.

³³⁰ Year reflects the last time a policy or plan was updated and was available in the public domain.

³³¹ The term “pillars” is a generic term to represent the core principles of the plan. In the individual plans the terms varied and included vision, guiding principles, strategic framework etc. Each were condensed for analysis.