2010 Vancouver Winter Olympic Games - A Case Study on the Integration of Legacy with Urban Planning and Renewal Initiatives Relative to Planning

Matthew Leixner
University of Windsor

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2010 Vancouver Winter Olympic Games:  
A Case Study on the Integration of Legacy with Urban Planning and Renewal Initiatives Relative to Planning

By

Matthew S. Leixner

A Thesis
Submitted to the Faculty of Graduate Studies through the Department of Kinesiology in Partial Fulfillment of the Requirements for the Degree of Masters of Human Kinetics at the University of Windsor

Windsor, Ontario, Canada

2018

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2010 Vancouver Winter Olympic Games: A Case Study on the Integration of Legacy with Urban Planning and Renewal Initiatives Relative to Planning

by

Matthew S. Leixner

APPROVED BY:

L. Glassford
Faculty of Education

C. Greenham
Department of Kinesiology

S. Martyn, Advisor
Department of Kinesiology

May 2, 2018
DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

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ABSTRACT

Through the use of critical review and analysis, this study established a working definition of urban planning and urban renewal in addition to the initiatives that are of interest to mega-sport event planners. Legacy is defined along with the pillars which comprise it. These definitions, initiatives, and pillars acted as the framework for the study to be conducted on the Vancouver 2010 Winter Olympic Games; specifically, the bid process occurring from late 1997 until 2 July 2003. This time period provided the information relative to the Vancouver-Whistler 2010 Bid Corporation, and highlighted what this group deemed important for the community, Olympic Movement, and the 2010 Olympics throughout that timeframe. Further, the analysis observed the gathered information from the Vancouver-Whistler 2010 Bid Corporation, and what VANOC2010 accomplished throughout the Organization Phase leading up to the Games. The analysis phase of this study determined the success and failures from an urban planning and renewal perspective relative to Vancouver 2010. This study assessed the organizing committee’s ability to incorporate legacy into the Winter Olympic Games, based on what the Vancouver-Whistler 2010 Bid Corporation had outlined.
DEDICATION

This thesis is dedicated to my parents, family, and friends for raising me and inspiring me to be who I am today; for supporting me unconditionally on any adventure I wished to take on.

Thank you!
ACKNOWLEDGEMENTS

First, I would like to acknowledge the work and effort put forth by my advisor, Dr. Scott Martyn, without you as a mentor this research would have been along a different path, deflecting me from a true interest. Furthermore, thank you to the members of my committee, Dr. Craig Greenham and Dr. Larry Glassford. Without their efforts and willingness to be a part of my education process, I would not be able to achieve this goal today.

Also, thank you to the many professors and staff I have had the privilege of being taught and influenced by throughout my schooling. You have all shaped my interest and understanding of Sport Management and other topics, arraying from popular culture sporting events to class trips; thank you.

Finally, I would like to acknowledge my friends, for tolerating me through the most stressful of times; and peers, for providing endless examples of why I chose to continue my education at this level. We have aspired to set goals for ourselves, and motivated each other to be the best we can be. When we entered the Master’s program, at orientation, we were told to enjoy the experience, and I can say, I truly believe we did… but we always did before they told us that anyway.
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CHAPTER 1
INTRODUCTION

During the late 1900s and early 2000s the Olympics’ bid cities became evenly ranked in terms of capabilities and power with respect to sport infrastructure. Where technology and knowledge are rapidly growing and becoming more available for all nations, it is difficult for them to distinguish superiority, power, and wealth amongst one another. A constant arena used to express such dominance throughout history has been war and sport, as witnessed within major news headlines and other media sources (Kinkema & Harris, 1998, pp. 1; Carruthers, 2011, pp. 5). Moreover, sport is becoming ever more popular and important to society, specifically in the westernized developed nations. Financially developed nations worldwide seek to prove their dominance; their ability to compete towards political superiority in the western world, more rapidly than others. Sport and the associated venues, provide the opportunity and site for governments to flex their metaphorical muscle over others. Success in international sport competition both participative and hosting is a tool of domestic policy that can attract benefits to the country (Reiche, 2015). This need for perceived power specifically through the hosting of international sporting events has escalated the financial, environmental, and social limits governments and cities are willing to push their communities in order to attract the eyes of the world for a remarkably short period of time.

The potential political, physical, cultural, economic, educational, and environmental stress a community can face as a result of hosting these international mega-sporting events can impact the community in both a positive and negative way. Many cities hope that throughout the bid process the community will be effectively
positioned to advance forward in a post-games environment. Specifically, advancing forward in terms of being better equipped to provide their citizens with a service, technology, or experience than they were prior to hosting; with more infrastructure and other legacy outcomes, providing those individuals impacted what they feel needs improvement, thereby enhancing the attractiveness and productivity of the municipality. Examples include an improved transit system to minimize traffic, pollution, and commuting times; a museum can act as a way to incorporate the Olympics with education and history; and facility infrastructure can lead to further sporting events, creating sport engagement opportunities in the community. The stress areas listed above are also defined as potential pillars of legacy. In the sporting context legacies are typically associated with the by-products of hosting an event (Loepkey & Parent, 2012a). Post-games legacies can be intended or unintended by event and civil planners. Stakeholders within the civic community may advocate for projects to be funded, and request support from the public with the arguments of a projects legacy will provide future success in any if not multiple of the six previously mentioned stress areas (Martyn, 2016). Moreover, to be in a position of success following an event is a result of understanding and planning for the needs of a community.

The first of two common groups that will be mentioned throughout this study are the Vancouver-Whistler 2010 Bid Corporation which is an independent group affiliated with the municipalities of Vancouver and Whistler, however, not a direct extension of their governmental structure. The role and responsibility of this corporation was to create a bid in order for Vancouver and Whistler to host the 2010 Winter Olympics. The second organization is VANOC2010; often labelled the Olympic Games Organizing Committee
(OCOG), its role and responsibility was to plan the Games once the Bid Corporation had won the process to become the host of the 2010 Winter Games. This study broke down and analyzed the bid submitted to the International Olympic Committee (IOC) by the Vancouver-Whistler 2010 Bid Corporation on behalf of the communities of Vancouver and Whistler for the right to host the 2010 Winter Olympics. The study analyzed the 2010 Olympic Bid Book for Submission to the IOC, taking note of what the Vancouver-Whistler 2010 Bid Corporation promised as of 2 July 2003; then analyzed again what was completed at the dissolution of the Vancouver Olympic Committee 2010 (VANOC2010). The findings have been organized, critiqued, and compartmentalized in comparison to the definition of how the Vancouver-Whistler 2010 Bid Corporation approached the construction of the bid to host the 2010 Winter Olympics with urban planning and urban renewal as the primary objectives.

Important Dates of the Bid Process

This section of the document has two main purposes. The first is to highlight important dates regarding the formation, recognition, sponsorship, and decision making timeline of the Vancouver-Whistler 2010 Bid Corporation. The second purpose is to highlight the short period of time, this corporation, a group of individuals, organizations, cultures, levels of government, and other various stakeholders had to come together and create this Bid Document, which later won the opportunity to host the 2010 Winter Olympics. In addition to the limited timeframe allocated to planning, VANOC2010 also had to contend with new governments elected at both the federal and provincial levels in Canada and British Columbia (Canadian Press, 2009).
In 1997, the Vancouver-Whistler 2010 Bid Society was formed by and included a group of Vancouver organizers and entrepreneurs. Although the Vancouver City Council officially sanctioned the society, it initially denied funding. This society was not publicly funded until later that year when the provincial New Democratic Party (NDP) provided $50,000 in start-up funds (Vancouver 2010 Bid Corporation, n.d.). In December 1998, the Vancouver-Whistler site was selected by the Canadian Olympic Association (COA) as Canada’s bid. The communities of Calgary and Quebec City were also candidates (NEWS 1130, 2010). Calgary was the most recent Canadian municipality to host an Olympic Games in 1988 (International Olympic Committee, 2017); Quebec City had previously bid on the 2002 Winter Olympics, losing in the end to Salt Lake City (Clarey, 1995). On 11 June 1999 the Vancouver-Whistler Bid Society was replaced by the Vancouver-Whistler 2010 Bid Corporation (Vancouver 2010 Bid Corporation, n.d.).

In 2001, The Government of Canada began efforts to support a ‘Quality Games to Engage all Canadians’; as well as argue that both French and English languages should be used to promote the efforts (“Canada’s Games”, n.d.). Also in 2001, several community organizations formed the ‘Impact of Olympics on Community Coalition’ (IOCC) (Makarenko, 2006). It was not until 24 July 2001 that British Columbia Premier, Gordon Campbell, committed his provincial Government’s support to Vancouver-Whistler 2010; and it was on 8 November 2001 that Canada’s Prime Minister, Jean Chretien, publicly announced the Federal governments support for the bid (“Canada’s Games”, n.d.). Vancouver City Council formally endorsed the bid on 26 March 2002 (Makarenko, 2006); and the last branch of government to endorse the bid was the Whistler Municipal Counsel, which endorsed the bid on 21 October 2002.
In July 2002 the IOC Candidature Acceptance Working Group published a report indicating that it had received bids from eight cities (Makarenko, 2006). In addition to Vancouver, the other cities that submitted bids to host the 2010 Winter Olympics were Sarajevo, Bosnia and Herzegovina; Andorra; Bern, Switzerland; Harbin, China; Jaca, Spain; Pyeongchang, South Korea; and Salzburg, Austria (NY Times, 2002). In August 2002, the Bid Corporation received 22 recommendations from the IOCC. The Corporation responded with a ‘2010 Inclusive Inner City Commitment Statement’ (Makarenko, 2006). The Statement highlighted issues to address the participation and equality of low-income citizens including 14 areas of focus. The areas of interest included: Accessible Games; Affordable Games Events; Affordable Recreation and Community Sport; Business Development; Civil Liberties and Public Safety; Cultural Activities; Employment and Training; Environment; Financial Guarantees; Health and Social Services; Housing; Input to Decision-Making; Neighbourliness; and Transportation (Vancouver-Whistler 2010 Bid Corporation, 2002). On 28 August 2002, Vancouver-Whistler was selected by the IOC Executive Board to make the short-list of Olympic host-city hopefuls (“GamesBids”, n.d.; IOC Candidature Acceptance Working Group, 2002). All partners involved, including the Governments of Canada and British Columbia; the City of Vancouver and the Resort Municipality of Whistler; the Canadian Olympic Committee and Canadian Paralympic Committee; and the Bid Society, signed the multiparty agreement on 14 November 2002 (“Canada’s Games, n.d.). On 10 January 2003, the Bid Corporation forwarded the full bid book to the IOC for consideration as a host city (Redpath & Huhtala, 2002).
The Bid Corporation faced their largest obstacle when a change in government initiated investigations focusing on whether hosting the 2010 Olympics was deemed beneficial and wanted by the community. The result was a non-binding plebiscite held in Vancouver on 22 February 2003. The plebiscite comprised a simple question- “Would you like to host the Games?”- the results voted by the citizens were 63.4% in favour of hosting the Games (“GamesBids”, n.d.). From February through April 2003 the IOC Technical Evaluations took place (Redpath & Huhtala, 2002); the IOC Evaluation Commission visited the Canadian candidate city in March of 2003. In May 2003 the IOC released its final report based on the findings from the technical evaluation visits (Makarenko, 2006); the report incorporated sections on the dates of the 2010 Olympic Winter Games, the Olympic Village, Accommodation, Technology, Public Opinion, and Maps relevant to each host site (IOC Evaluation Commission, 2003). The formal vote to select the host for the 2010 Winter Olympics, took place on 2 July 2003 (NEWS 1130, 2010).

**Vancouver-Whistler 2010 Bid Stakeholders**

In this section, the Vancouver-Whistler 2010 Bid stakeholders are introduced. These groups consist of international organizations, national organizations, and cultural organizations. The ideals and goals of these organizations are important to this research project. These stakeholders had similar objectives, related to the hosting of the 2010 Vancouver Olympics, as well as moving the Olympic movement in a positive direction. These stakeholders also had differing objectives and ideals in what they were trying to achieve and for whom they were trying to achieve them. Each of these stakeholder organizations were able to nominate a pre-determined number of representatives to the
VANOC Board of Directors. These individuals and their associated positions were identified in the Vancouver 2010 Progress Report. Throughout the organization period, multiple individuals were replaced as a result of government elections, changes in government, and individuals being promoted or demoted within organizations. Unfortunately, as a result of these changes, it is difficult to garner an accurate depiction of all those individuals involved, as well as the timeline of their involvement with VANOC2010. For the most accurate account of the VANOC Board of Directors, this study will identify the Board of Directors as those who comprised the group as of July 2008, the date the VANOC2010 Progress Report mentioned above was published.

**International Olympic Committee**

The IOC describes itself as “the supreme authority of the Olympic Movement.” Currently composed of 95 volunteer members, 41 honorary members and 1 honour member from around the world; they represent and advocate for the Olympic movement and the IOC, educating and endorsing the organization in the nations they represent. The IOC manages and oversees the interactions between all organizations and parties involved with the Olympic Movement, initiating efforts to celebrate sport, promote sport for all, and the promotion of Olympism (International Olympic Committee, 2016).

**Canadian Olympic Committee**

The Canadian Olympic Committee (COC) is largely funded privately and is an independent organization that provides resources to Canada’s elite athletes as they prepare for the Olympic, Youth Olympic, and Pan American Games. Their other responsibilities include furthering the Olympic Movement in Canada through the promotion of Olympic values. This is done in an effort to engage the Canadian public so
sport remains a contributor to the development of Canada’s citizens (Canadian Olympic Committee, 2016). The Canadian Olympic Committee was allocated seven members into VANOC’s Board of Directors. The seven representatives from the COC were partially comprised of mandatory members as advised by VANOC’s governing by-laws which stated that all Canadian IOC representative members must be included. Canada’s four IOC members Richard Pound, Charmaine Crooks, Beckie Scott and Paul Henderson; Vice– President Walter Sieber, and the COC President, Michael Chambers. The final member was Michael Phelps, a native of Vancouver, Phelps had recently retired from the position of CEO of Westcoast Energy Inc. Phelps has held numerous job titles within Westcoast Energy Inc., a Crown Attorney in Manitoba, advised and assisted numerous Ministers throughout Canada, and continued to sit on many corporations’ boards at the time of this nomination (Ski Trax, 2003; Cdnolympicteam, 2006).

**Canadian Paralympic Committee**

The Canadian Paralympic Committee (CPC), is a non-profit, privately operated organization composed of 27 member sports dedicated to optimizing the Paralympic movement in Canada. Collectively, they strive to make Canada the best Paralympic nation in the world, and do so by ensuring that Paralympic sport remains sustainable to better provide Paralympic athletes with the resources they need to reach the podium (Canadian Paralympic Committee, 2017). The CPC was able to nominate one member to the VANOC Board of Directors. The individual nominated was Patrick Jarvis, President of the CPC, long-time member of the CPC, and a former Paralympic athlete (2010 Legacies Now, n.d.).
**Vancouver-Whistler Bid Society/Corporation**

The Vancouver-Whistler 2010 Bid Society was formed in 1998, and was chaired by Arthur Griffiths, a businessman and former owner of the National Hockey League’s Vancouver Canucks and National Basketball Association’s Vancouver Grizzlies (NEWS1130, 2010). In 2002, the Bid Society officially changed its name to The Vancouver-Whistler 2010 Bid Corporation. The Bid Corporation was responsible for creating the framework later used by the organizing committee to plan and organize the Games. The personalities and stakeholders that compose this corporation include representatives from the Governments of Canada and British Columbia, the City of Vancouver and the Resort Municipality of Whistler, the Canadian Olympic Committee, First Nations communities, as well as the business and sport communities (Government of British Columbia, 2016). The Vancouver-Whistler Bid Corporation, as a group, nominated Jack Poole to be the chairman of the Board of Directors (VANOC, 2008).

**The Federal Government of Canada**

The Federal Government of Canada is the highest level of government in Canada. Responsible for the allocation of resources across Canada, they also determine the allocation of resources towards hosting events, including the size and type of event (McCloy & Thibault, 2013). Similarly, to the province of British Columbia, the Federal Government of Canada provided funding to the Bid Corporation to bid and plan the Games. As a result, they were allocated seats on the VANOC board of directors. The three allocated seats were filled by Peter Brown (VANOC, 2008), a native of Vancouver and CEO of Canaccord Capital Corp., Director of Investment Industry Association of Canada. He also had experience serving on boards of international events having served
for the Expo ’86 (Canadian Press, 2009); Jacques Gauthier (VANOC, 2008), a Montreal Lawyer, Senior Vice President and COO at Kruger Inc. and an advocate of sustainable energy and its development (Canadian Press, 2009); and Carol Stephenson (VANOC, 2008), Dean of the Richard Ivy School of Business at the University of Western Ontario, with three decades of experience in business, with emphasis in the telecommunications and technology domains holding numerous high management positions of corporations (Canadian Press, 2009; Bloomberg, 2017).

The Provincial Government of British Columbia

The Government of British Columbia is the level of government and group responsible for governing the province of British Columbia. They were also responsible for a portion of the funding for the potential 2010 Games, and thus involved in the Multi-Party agreement (CBC Sports, 2002; Rogers, 2002). The government was allocated three potential spots to appoint members to the VANOC Board of Directors. The three members selected by British Columbia Premier Gord Campbell were Rusty Goepel, the senior Vice President of Raymond James Ltd. and Director of the investment policy committee for the Canadian Olympic Committee; Richard Turner, President and CEO of IAT Management Inc.; and Ken Dobell, Deputy to the Premier (Ogilvie, 2003).

The Municipal Government of Vancouver

The City of Vancouver is a municipality located on the West Coast of Canada. It is the sixth largest municipality in Canada and had a population of 603,502 based on the 2011 census. The Greater Vancouver area, however, ranks third in Canada relative to populations (City of Vancouver, 2017). The Government of Vancouver consists of a mayor and publicly elected officials which compose the City Council, who in addition to
the Park Board “provide the vision and direction for the future of Vancouver” (City of Vancouver, 2017). The city of Vancouver was able to nominate two members to the VANOC Board of Directors. The individuals nominated were Jeff Mooney, owner of the Vancouver Canadians professional baseball team and CEO of A&W Food Services of Canada Inc. (Bloomberg, 2017); and Judy Rogers, Vancouver City Manager (Smith, 2008). Judy Rogers was replaced by the new City Manager, Penny Ballem, in 2009 (Globe and Mail, 2009).

**The Resort Municipality of Whistler**

According to their website, the Resort Municipality of Whistler (RMOW) was “led by elected council and administered by an executive team and staff.” Whistler is a municipality striving toward sustainable development, providing a caring and accountable community, providing exceptional service and tourism. The municipality is committed to improvement in the services offered and the means in which they offer them (RMOW, 2017). Whistler was able to nominate two members to VANOC Board of Directors. The individuals nominated were Barrett Fisher (VANOC, 2008), President of tourism Whistler (CTV News, 2008); and Jim Godfrey (VANOC, 2008), administrator at the Resort Municipality of Whistler, and responsible for the implementation of Whistler 2020, showing support for sustainable development (Ferrera, 2010).

**Indigenous Groups**

Squamish and Lil’wat First Nations groups are two First Nations groups delegated the responsibility of building legacies to benefit First Nations communities as a result of the Vancouver Games. Both groups have ancient ties to the region, and continue to have land within the areas utilized during the Vancouver Games (Lil’wat Nation, 2017). The
Squamish and Lil’wat groups were able to nominate one member to the VANOC board of directors. The individual nominated was Gibby Jacob, a hereditary chief of the Squamish First Nation (CBC News, 2005).
CHAPTER 2
LITERATURE REVIEW

*Sustainable Development and Sustainability*

The term ‘sustainable development’ describes a process that originally drew awareness to the need to further plan the direction of a community with the best interests of the environment in mind (Gaffney, 2013). Long-term planning is a process which benefits the next generation of a community without jeopardizing the current state of resources (Gibson, Kaplanidou, & Kang, 2012). Powerful sporting organizations and developed nations began to take notice of sustainable development as globalization began. Governments and corporate organizations are known to incorrectly adopt and allocate the term sustainability; commonly interchanging it with other terms such as urban planning, robustness, and durability (Gaffney, 2013). Christopher Gaffney has highlighted the need for independent urban planners. There is a need because the duration of time related to bidding is not long enough for cities and bid corporations to thoroughly restructure a communities’ infrastructure effectively, to maintain purposefulness in the post-games era.

Scott Campbell (1996) describes a constant conflict within planning initiatives of a city. Sustainable Development is general with multiple meanings, often perceived to be different by other individuals. Sustainable development projects a change to somethings current state, however, without solidly addressing any policies, tends to not implement the anticipated change. The definition and actions leading to sustainability should be broadened to produce in economic and political arenas to resemble the same way development evolves in natural ecosystems. It is the long-term ability of something to
reproduce. Therefore, the goal for urban planning is to remain broad; providing balanced sustainability to the three conflicting perspectives highlighted in Figure 1, to move forward and reproduce with the overall wishes and needs of the community being the priority.

Figure 1: The triangle of conflicting goals for planning, and the three associated conflicts. Planners define themselves, implicitly, by where they stand on the triangle. The elusive ideal of sustainable development leads one to the center (Campbell, 1996).

Sustainable development is described as the balance of the three conflicting perspectives: Economic, a city is a location competing against others for the right to distribute, utilize, produce, and innovate; Environmental, the city is in competition with the environment, using resources and creating waste which can deplete and/or harm the environment; and Equity, the community is a conflict zone for stakeholders who each understand there are only so many resources to be dispersed to benefit the community long-term. Lamartine DaCosta and Ana Miragaya (2015) argue that cities need to address the refreshment of
materials they utilize and do not replace. Legacies provide a legitimate way to react to the changing urbanization of regions which is typically evident as they attempt to host these mega-events.

Sustainability, as defined by Stephen Wheeler (2016), is ‘getting by and continuing to function’. Wheeler continues to say sustainability should “cause change, and adapt to change in a quick, efficient manner to benefit the community and those within it” (Wheeler, 2016). Sustainability is a term commonly misused and generally over interpreted to summarize many terms, typically in over-generalized words. As a result of the generalization, the term sustainability is not enough and needs to incorporate specific planning terminology to be more effective. Other terms which describe the process of planning include spatial planning, land-use planning, city planning, town and regional planning, and development planning within the English language. French, Spanish, and terms utilized in China exist as well, typically describing the inclusion of social and economic gains compared to physical improvements (UN, 2009a). Emilia M. Rebelo (2009) explains how urban decision makers, as leaders and persons in power, approach planning in their community, utilizing tools at their disposal to augment the community to develop it until the community achieves the perception and acknowledgements they wish. The tools he addresses are: the ability to specify development and uses of land and urban sites; general or specific development through other tools; or, implementing guidelines for public participation in decision making opportunities. Furthermore, participation can benefit the community through increased social capital, better designed urban projects, and can address participants’ needs within the planned strategies (UN, 2009a). Many communities do not exist in isolation; they
have impacts on other communities through export, immigration, tourism, and social popularity (Wheeler, 2016).

**Mega-Events: Opportunity and Planning Process**

Development of infrastructure efforts, have the potential to be completed regardless of hosting an event or not; hosting a mega-event, however, sets a deadline for completion, ensuring the development occurs and is expedited (Reiche, 2015). As further discussed by Dean Baim (2009), the Olympic games provide an opportunity for governments to expedite decisions to develop or improve aspects of the infrastructure, environment, inclusiveness, and industry of a region. Having these developments completed within a seven-year timeframe, is both a positive and negative for the community. A positive to this short time frame is that projects are completed rapidly. As noted by Becca Loepkey and Milena M. Parent (2012a), legacies can be deemed a success or failure, and that can be dependent on how the public’s perception fluctuates. The downfall is due to this rapidness, projects have potential to be completed to a lesser quality, at a higher cost, and with less planning to further benefit the community in a post-Olympic games environment (Baim, 2009). Fortunately, and unfortunately for that matter, Stacy-Lynn R. Sant & Daniel S. Mason (2015) argue that the prospective hosts’ strategic vision and management of legacy will determine the success or failure of a bid. The phraseology utilized during planning phases are beneficial to realizing there is a need, however, the successful completion of ideas speaks louder to influence change (Campbell, 1996).

Mathieu Djaballah, Christopher Hautbois, and Michel Desbordes (2015) developed a ‘*Sensemaking Process*’ which, when utilized by organizations and potential
bid corporations, can predict potential outcomes for current decisions based on the past experiences of others. This is a three step process, including: a Scanning phase, encouraging stakeholders to observe internal and external information regarding current assets, needs, wants, and future objectives of the community; the Interpretation phase, involves organizing the obtained information and data from the scanning phase, to make a better and more informed decision, eventually leading to a decision (Porac et al., 2002); and, the Action phase is when the organization decides in what order to implement decisions made in the previous phases, with the focus being to minimize or eliminate social impacts that cause harm to the city (Hahn et al., 2014). Baim goes on to identify successful and unsuccessful attempts at government funded projects. The most beneficial communities are those where planning was already in progress prior to the awarding of an Olympic games. Games such as those in Los Angeles, Barcelona, and Tokyo included investments to higher need projects and typically at a lower value. Games such as those in Montreal, Sydney, and Athens were deemed less successful or failures based on the allocation of extremely high amounts of funding to less mandatory projects (Baim, 2009).

Although the plan is important to begin and provide direction throughout the process, the most important phase is the Action Phase as it symbolizes the extent to which teamwork and objectives of stakeholders mesh to eradicate differences and mold together for a greater cause (Djaballah et al, 2015). The outcomes and success of planning is never considered easy, many praise the idea of sustainability, few practice it; in most cases when all parties agree on a sustainability initiative, the initiative typically bypasses the main concerns needing to be addressed (Campbell, 1996).

Mega-events are distinct, and provide the stage and opportunity for social
change, for powerful stakeholders to implement change (Roche, 2000). Mega-events are defined as “sporting events that affect economies as a whole, grasping the attention of the world.” Mega-events hold international significance and draw large amounts of competitors, and spectators; in addition to the hosting of many workers and volunteers. Typically, to be planned, organized, and managed effectively there are many stakeholders involved including multiple levels of government, non-governmental international organizations, and must be very involved in international culture. Examples of mega events are: World’s Fairs, Expositions; World Cup of Soccer; and the Olympic Games (Heslop, Nadeau, O’reilly, and Armenakyan; 2013). Undeveloped or less developed nations interested in positioning themselves within international supremacy do so, as investing in sport provides the opportunities to benefit with infrastructure (Cornelissen 2010, Tomlinson 2010). Soft Power is the ability to shape the preferences of others, not through coercion, authority, or financial power, but through persuasion, and their trust in one’s abilities, knowledge, and experience (Nye, 2008). Although the main focus is on sport, and these facilities will be produced, with proper planning, these nations can benefit in many other areas including transportation upgrades, telecommunication, and tourism (Cornelissen 2010, Tomlinson 2010).

**Collaborative Planning Theory**

Dallen J. Timothy and Cevat Tosun’s (2003) participatory, incremental and collaborative (PIC) model (see Figure 2) highlights collaborative planning and the three steps to success. The participatory step highlights the immersion of a host local government in the planning process; incremental, slowly and cautiously employing the goals of the process; and collaboration, incorporating the efforts and wishes of central
government, local private and public organizations, and individuals within the community. Robert Goodspeed (2016) states that in regards to Collaborative Planning Theory (CPT) multiple authors utilize CPT in their research, yet do not distinguish themselves as advocates. David E. Booher and Judith E. Innes (2002) observe the interaction of multiple stakeholders in these situations to obtain the best outcome using the DIAD model, which in itself observes: Diversity of Interests; Interdependence of Interests; and Authentic Dialogue. Patsy Healey (1997) states Collaborative Planning is the most intellectual version of planning; providing the most scope across spatial sense, economic, and environmental situations, applying to sociologists work. Healey (2003) argues there are more outcomes to generalize decisions on than just economic outcomes, by focusing on more social aspects as planners and leaders, in certain situations with proper urban governance, proper communication skills can be harbored to improve quality of life for diverse groups within the community. Proactively seeking appropriate partnerships with an understanding of all stakeholders is crucial (Houghton & Stevens, 2011). In their study of tourism destinations, Petia Petrova and Dean Hristov (2016) highlight the negative impacts that can occur when all stakeholders are seeking different outcomes through different action plans; as well the positive impacts which can occur when the stakeholders are in unison about outcomes and action plans.
In their 2003 and 2006 articles, Thomas L. Harper and Stanley M. Stein observe Dialogical Planning, and suggest that planning can only be beneficial when all individuals’ opinions are expressed. However, this approach falters as planners stray from the consensus shared values. Charles J. Hoch (2007) compared CPT through pragmatic philosophy, exemplifying individuals’ response and acceptance to ideas; meaning ‘a proposition is true if it works satisfactorily, practical ideas are accepted and unpractical ideas are rejected’ (McDermid, n.d.). Tore Sager (2002) directed attention towards Social Choice Theory and commonly discussed CPT; analyzing individual needs or decisions to culminate one collective decision (Myerson, n.d.).
Social Choice Theory

Social Choice Theory is defined as “investigated procedures that attempt to blend the preferences of the many into social ranking of alternatives (Johnson, 1998). Also, Social Choice Theory is associated with the principles acting as the underlying choice of differing preferences within a group of individual stakeholders amongst the varying options (Roberts, 2006). Furthermore, Pat R. Sniderman, Julie Bulmash, Debra L. Nelson, and James Campbell Quick (2010) define the term Participative Decision Making as a “decision making process in which individuals who are affected by decisions influence those decisions”; which will increase as decision making become more decentralized. They also define the relationships that prosper based on this decision making process as social decision schemes.

What is Legacy?

The term legacy itself is deemed “elusive, problematic, and even dangerous” (Cashman, 2006, p. 15). Throughout the literature it is difficult to find a consistent definition for the term and idea of ‘Legacy’. In the Introduction six potential legacy outcomes were mentioned: political; physical; cultural; economic; educational; and environmental (Martyn, 2016). Richard Cashman (2006) recognizes six, similar but more specific, main categories legacies can exist within: sport; infrastructure; economic; information and education; public life, politics, and culture; and symbols, memory, and history. Jean-Loup Chappelet (2006) argues only five potential legacy outcome areas: sporting; economic; infrastructural; urban; and social. Interestingly, Chappelet neglects environment as a pillar of legacy unlike Cashman and Martyn. Kiki Kaplanidou and Kostas Karadakis (2010) argue that due to disagreement amongst scholars, there can only
be three true categories of legacy: economic; social; and environmental; as many of the previously highlighted categories can be grouped into one, social. Legacy was composed and is valued as a term because people observe it as a grey area, where they could gain advantage to achieve goals which best benefited them; while depicting success to others as well, with the possibility of significantly differing views (Cashman, 2006; Gold & Gold, 2009). For the purpose of this project, the current analysis will focus on the pillar of infrastructure, primarily hard infrastructure, and the physical adaptations in the community.

Legacy is any effort that leaves the city in a better position post-games than they were prior to hosting (Martyn, 2016; Cashman, 2002). Cashman (2002) argues a legacy can constitute social programs, environmental advances, and physical infrastructure. The need to plan and bid appropriately, he suggests, must be with citizen input. As mentioned previously, the role of the IOC is to advance the Olympic Movement and ensure all components of any Olympic Games are of the highest quality. Their main focus is not the legacy or long-term success of any host city, but for the long-term success of the Olympic Movement. The IOC defines legacy by providing a definition of ‘Event Legacy’ - captures the value of sport facilities and public improvements that are turned over to communities or sports organizations after the Olympic games. This also includes a legacy fund to operate and manage the sport facilities and venues (Gratton & Preuss, 2010; Preuss, 2007). Holger Preuss (2007) continues this discussion by suggesting that legacy is self-defined by those who are trying to implement legacy strategies. This is based on the community’s needs. Legacy is an overarching and broad term that encompasses, is misinterpreted as being, and confuses many other terms that are instead intended as a
means to implement or utilize mega-events to initiate lasting legacies. These terms include urban planning, urban regeneration, tourism, economic activation, community involvement, community spirit, and international reputation (Preuss, 2007). The IOC utilizes a uniquely one dimensional approach to legacy due to the primary objectives of the organization. This, in turn, leads to missed potential legacy examples. Stacy-Lynn R. Sant (2015) describes legacy as forever changing with further experiences and situations. Thus, evolving into a term more and more defined by the context of each unique situation.

Loepkey and Parent (2012b) identify a transition of legacy efforts expanding and connecting into environmental and political goals throughout the history of the modern Olympic movement. Legacy efforts and initiatives have become more complex, with the influence of major stakeholders and decision makers, as well as legacy’s governance being more linked to institutionalization. Institutionalization is both the process, by which events and structures become established habits of social behavior over time; and properly defining what is real or not, observing what we take for granted and have been influenced by: the IOC, previous bidders of Olympic Games, media, sponsors, and athletes (Berger & Luckmann, 1967; Zucker, 1977; Loepcky & Parent, 2012a). Many individuals, groups, and organizations utilize the Olympic Games and the resources which accompany it, to better fulfill their own goals and objectives. These stakeholders often refer to numerous economic, social, and environmental benefits as legacies. It is these, they argue, that will be identifiable for decades, and justification for the excess public support and aid required to bid, plan, and host these Games (Hall, 2006; Girginov & Hills, 2008; Gold & Gold, 2009). In this instance, certain individuals benefit based on
their power in multiple coinciding organizations, achieving their personal or organizational agendas and likely neglecting the Olympic movement, or greater good of the community (Renson & den Hollander, 1997).

**Urban Planning and Urban Renewal**

Urban Planning is strongly influenced by developed countries. With the increased incorporation of technology, cities with their rapidly evolving, present form dictate how planners are able to act on issues that have been considered out of their control in the past. Many cities in developing countries are attempting to mirror cities in developed countries, due to the superiority and reign of decentralizing communities. Urban planning in these cities is an attempt to level the playing field and compete with the West; achieving political interests to greater benefit the minority demographic, being the higher socio-economic class, excluding or limiting resources provided to the poor (UN, 2009a). Decentralization is the process of dispersing resources in an attempt to transfer power to different stakeholders (Lane, 2003; Chan & Gao, 1993); spreading infrastructure across a greater area, instead of a crowded urban centre. Planning processes should observe the strengths and lifestyles of all stakeholders involved, as well as forecast the opportunities for low income individuals into the future, to maximize their potential and therefore the potential of the community (UN, 2009a).

As nations and communities continue to expand, grow, and adapt to constant environmental and economic changes, the solidarity of any theory aimed at tackling urban renewal and planning will diminish. The success of Urban Planning and Renewal in the future will be dependent on a local community, harnessing the general needs and wants of their constituents to garner positive outcomes, as deemed by them (Goodspeed,
Public-Private partnerships are another but significantly different form of participation. In developing countries, these partnerships provide resources to depleted or lacking governments and organizations; in developed nations, these partnerships typically involve investment to urban projects where the investment will still benefit the best wishes of the private enterprise, while contributing to the modernization, economic, and physical regeneration directives of the city (UN, 2009a). Chalkley and Essex (1999) and the International Olympic Committee (2017) observe throughout the history of the Olympic Games the impact on the host city has changed as a response to phases and patterns the Olympic Movement was experiencing. The first stage covered the first three Olympics, when they were poorly planned, resulting in very minimal urban impact. The second stage encapsulates the Games of 1908 through 1932; as the size of the events grew larger, it resulted in select infrastructure being developed for the select purpose of benefitting the Games. The third stage includes the Games of 1936 through 1956 where the facilities became the ‘flag-ship’ symbols of the community, generating greater attention than previous standards, albeit still modest and rather isolated compared to today’s reach. The final stage began in 1960 and continues into present, representing the Games as the opportunity to make drastic urban changes to the environment and landscape of the host community. The grand scope of the event has emerged as a means to garner the resources to make substantial changes within a community.

Unfortunately, as addressed by Brian Chalkley and Stephen Essex (1999), due to the one-off nature of sporting mega-events like the Olympics, additional Urban Planning actions need to be exercised to facilitate the post games use of infrastructure (Chalkley & Essex, 1999); sustainability is not simple and needs endless attention to prosper
As Rod Windover (2012) highlights from *The 2010 Olympic and Paralympic Winter Games: The Multi-Party Agreement*, a Multi-Party agreement highlights the potential roles and responsibilities of those parties interested in partaking in the organization of the Games; one goal potentially being the creation or implementation of legacy products or services (Windover, 2012).

John Horne (2015) argues, Mega-Sport Events (MSEs) have supplanted non-sport Mega Events, and as a result cause highly significant outcomes in relation to social, political, and ideological consequences (Horne, 2015). Elisabete A. Silva, Jack Ahern, and Jack Wileden (2008) explain the term Urban Management as the requirement to understand the environmental, social, and economic implications of a city's spatial expansion or centralization strategies. Environmental planning that does not account for practical human practices will not succeed. Simultaneously, urban planning failing to account for environmental impact, will also fail the community and its citizens’ needs (Silva et al, 2008). Heather J. Gibson, Kyriaki Kaplanidou, and Sung Jin Kang (2012) mirror this balance; with the term triple-bottom-line as the three pillars of sustainability. Economic, hoping the financial benefits are there for the majority of stakeholders; Social, tourist motivation based on satisfaction and perception; Environmental, being able to host and attract nationally and globally, without affecting the regions carbon footprint. The UN-Habitat (2009) has highlighted this important principle through their work in relation to productive planning: recognize the need to protect natural resources and the environment, or the consequences if you do not; address social justice; illustrate community involvement, encourage dialogue and debate amongst various stakeholders; incorporate spatial diversity; view projects as a step to being better, not as an end-result;
remain in-line with budgets and decision making process; and remain strategic. The UN-Habitat continues to addresses the need of *Urban Governance*, engaging in more effective planning. Integrating planning and management goals and strategies more productively; incorporating the agendas, needs and wants of stakeholders who create the problems, those who are affected by the problems, and those who have the ability to resolve the problems.

Urban Planning should be incorporated with the best interests of the public in mind, and all actions should implement socialization. Recent urbanization has incorporated urban sprawl degrading the means of the environment and limiting public access to land (Quarshie, n.d.). Peter King, David Annandale, and John Bailey (2003) explain Urban Planning to be unique, and ever-changing to specific communities, providing a way for a community to be recognized or rebranded as a whole. Urban Planning provides a means to change or improve significant projects through increased investment to the region. A new development is not necessarily one lone project to a greater picture, it can be one project of many towards a greater goal (King et al, 2003).

Sustainability requires: results-oriented problem-solving, a long-term perspective, and holistic thought; these must rely on support and commitment from all stakeholders, while incorporating theorized academia, though not becoming reliant upon it (Wheeler, 2016). Consumer Capitalism directly applies to how Urban Planning and Renewal is beneficial to a community. It explains the process of going from a need in a community to having solved the issue and providing a resolution, through recognizing the need, addressing how the need will be fixed, and going through the process of fixing the need. Consumer Capitalism is a process of using the event to address these needs. Urban planning is
deciding the appropriate action to best address the need for the long-term success of a community (Horne, 2015). To better acclimate to the decision-making process of the bid community, urban planning as defined by the City of Vancouver (2016),

“is the process of determining action to improve the cities livability, growth and density while not jeopardizing its natural beauty. Creating a collection of neighbourhoods that its residents feel comfortable to work, play, and shop. Feeling accepted and supported by their fellow people.”

Functioning in unison, urban renewal provides an opportunity for social inclusion and a way to address the needs of disadvantaged groups (Chan and Siu, 2015). Urban renewal is the best way to ensure a cities functionality does not deteriorate and in turn can act as a means to improve property values and environmental quality (Yi-Kai, Roper, Castro-Lacouture, and Kim, 2010).

**Infrastructure: Hard and Soft**

Throughout the bid process, and in preparation for hosting mega-events, the addition of infrastructure is appropriate and expected. Harry Solberg and Holger Preuss (2007) discuss infrastructure, noting that not all infrastructure is physical and tangible. *Hard Infrastructure* is broken down into Primary Hard Infrastructure, that which is directly related to sport in the sport event such as stadiums, arenas and special event facilities designed for pools and tracks; Secondary Hard Infrastructure, relates to infrastructure used for the event including, but not limited to, athlete villages and media buildings; and Tertiary Hard Infrastructure, infrastructure built to better equip the region to handle the event such as roads, airport advancements, sewage improvements, and hotels. Hard Infrastructure typically includes the structures which motivate tourism, as it
provides an opportunity for tourists to visit the area repetitively after the event is over (Preuss, 2007). Hard Infrastructure also provides a community with the means and potential to build an event portfolio, to better present itself as a host for other events in the future, and in turn increasing prolonged tourism (Ziakas & Costa, 2011). Chalkley and Essex (1999) provide examples of Hard Infrastructure projects developed for mega-events dating back to the turn of the century, which are still iconic today. These structures include: The Eiffel Tower, a legacy piece of the Paris Exhibition of 1889 to celebrate the centenary of the French Revolution; Wembley Stadium, a legacy piece of the British Empire Exhibition of 1924-5; and the Royal Festival Hall, a result of the Festival of Britain in London in 1951. However, although large capital projects are necessary to be completed to manage the capacity required for the Games, and may be common to the community they habituate now, many of the projects that are/were promised are, conversed about in government for years (Sant, 2015).

*Soft infrastructure* is an improvement of human capital and strengthens the destination profile of a city. Human Capital, when simplified, is determined to be knowledge and experience that can be utilized in the bid process, and win future bids. The brand of a city can be created by increased tourism infrastructure, and this planning should start in the pre-event period to create a “festival” vibe. Soft infrastructure is an image; portraying an image to the world of what the city is, or what it is capable of becoming, and achieving. With an experienced team competing for bids, the bid represents solidified ideas and missions (Solberg & Preuss, 2007).
Olympic Games: Evolution of Infrastructure Needs

The games have evolved significantly since their modern reincarnation in 1896. The drastic growth in the size and number of organizations in the Olympic Movement, and the games as a result, contributed to the need for more infrastructure; typically, larger and more immaculate than the previous games. This phenomenon, also known as gigantism, puts a financial hindrance on communities, stressing the importance for these host communities to receive something in return (Girginov and Hills, 2009). Sydney 2000 constructed two new stadia to support the anticipated crowds resulting from staging the Olympics, however, there was no need for the size of these stadia in the post-Games landscape (Searle, 2002). The first games to build a venue specifically for the Olympics was London in 1908, this was a main stadium. In 1912, Stockholm built a number of venues for multiple sports to be held in. This festival was the first to utilize government funding and the stadia were designed to express the culture of the Swedish people. The tradition of expressing culture through stadia is still implemented today (Chalkley and Essex, 1999). Antwerp in 1920, however, was the first bid to incorporate government support, at the time valued at BF$800,000. Without governmental support in today’s era, a bid will not be considered (Renson and den Hollander, 1997). The Vancouver bid, for example, included CDN$363,800,000 of government funding (VANOC Final Financial Report, 2014), compared to Montreal 1976 including CDN$1,166,000,000 (COJO, 1978), and Calgary 1988 included CDN$425,000,000 (CODA, 1988) in government funding. Vancouver utilized the least governmental support of the three Canadian Olympic hosts, a major accomplishment considering the praise Calgary received at the time they hosted for fiscal responsibility.
The Olympic Games financially cost far more than they return to a region; yet the right to host the Games are sought by many cities and winning this right is considered a privilege. Chalkley and Essex (1999) simplify the Games by identifying four stakeholders. The IOC holds power in the negotiations as the governing body overlooking the Olympics; International Federations (IF’s) organize the sports and govern the rules associated within their respective sports and determine appropriateness of the stadia used for the events; NOC’s organize and supply teams to the Games. Finally, the Olympic Organizing Committee is responsible for the physical planning, organizing and staging of the Games (Chalkley & Essex, 1999). Strain is placed on the host community to best plan the event, to garner positive outcomes to some extent from their financial obligations and investments into the bidding and hosting of the games.

Based on the Global Cities Index developed by A.T. Kearney Consulting (2014), DaCosta and Miragaya (2015) argue that many cities are choosing to bid on Olympic Games to strengthen their image worldwide, improving their assets, and portfolio, to emerge as the ‘Most Global City.’ They further explain how the utilization of the Global Cities Index, benchlearning based on potential longitudinal capabilities, can positively outweigh the findings resulting from the Olympic Games Impact (OGI) study, which can only carry a maximum term of 12 years. Although this projects major focus is infrastructural, J.R. Brent Ritchie (1984) highlights six major areas which can witness the largest impact as a result of hosting Mega-Events: tourism, psychological, socio-cultural, physical, economic and political. Loepkey and Parent (2012a) highlight the difference of approaches between several successful Olympics. Los Angeles 1984 produced a profit and in turn created an economic legacy for their Games; Calgary 1988 created permanent
infrastructure to be a legacy of the Games; Vancouver 2010 centralized sustainability in all aspects of planning; and London 2012 implemented strategies to provide opportunity for sport, social, economic, and environmental legacies.

**The Importance of Legacy to the IOC**

Legacy is a term adopted by candidate committees as a response to the struggles the IOC, OCOGs, and communities faced in the 1970s and early 80s. Although legacy efforts existed all along, the prominent inclusion of legacy efforts beginning in the 1980s began as a means to mitigate the large investments to organize an Olympic Games as a result of the rapid growth of the Games (Loepkey, 2009; Loepkey and Parent, 2012a). As legacy continued to gain recognition in all Olympic bids, the IOC deemed it necessary to host the first symposium on Olympic legacy in 2002, at the conclusion of which the IOC added a 14th mission to its charter, highlighting hosts must strive to incorporate a means to create legacies to benefit the community (Chappelet, 2008). Vancouver was the first host city to sign this contract, and as a result, Vancouver was the first host to fully incorporate legacy into all documents, and files; including the means of planning solely for, and proper management strategies for, these legacies (Sant, 2015).

Economic gains should not be the sole, or most significant reason for hosting an Olympic festival. Mega-events, because of their size and scope grasp the attention of national and international crowds. As such, they provide an opportunity to generate change and the opportunity for change to occur (Chalkley & Essex, 1999). This opportunity for change is dependent on constant adaptation; sustainability is not simple, it is not something attained once and discussed forever. Sustainability is a process requiring constantly deeper investigation and further development to be successful (Wheeler,
Soft Power/ International Image

Elite sport is beginning to be sought after by socially undeveloped or less developed nations. Medals are being won by these undeveloped nations internationally, and bids by similar nations are also being chosen by organizations worldwide with the IOC selecting China 2008 and Brazil 2016 to host the Olympics, while FIFA selected South Africa 2010, Brazil 2014, and Qatar 2022 to host the World Cup (Reiche, 2015). Although China and, at the time of voting, Brazil are deemed powerful economies in the world and are projected to close the social gap, there are still glaring social developments lagging behind the western world and other more developed nations (Chase-Dunn, 2005). Qatar, similarly to China and Brazil, is deemed a very wealthy nation, as a provider of oil and investor in sport around the world, as a city state, it contains many wealthy citizens. As discussed by Paul Michael Brannagan, and Richard Giulianotti (2015), Qatar’s issues lie with civil rights issues and their hypocritical approach to gaining soft power. Instead of improving the image of the nation in the eyes of the west, many address issues with human rights for migrant workers, laws surrounding gay rights, and the possibility of global sport bidding success a product of bribes. The reputation of this nation-state is, in-turn, being given the label of lacking integrity and honesty, hindering their acceptance worldwide.

Soft Power is a reflection of image. In this case, a nations image to the world, being powerful with ‘earned dominance’ in return of winning medals, or competition to host a mega-event (Nye, 2008). According to Veerle De Bosscher (2008), sport offers the battleground for nations to earn power and imply dominance without entering a military
or economic battlefront. Maurice Roche (2000) argues that the world has become so similar that although host cities try to create unique Games, the location can be substituted as a result of standardized interpretation of sport events; the uniqueness is transparent.
CHAPTER 3

METHODOLOGY

This research study incorporated a critical review and analysis of two documents in order to respond to the primary research question; were the Urban Planning and Renewal initiatives for the Vancouver-Whistler 2010 Bid Corporations’ bid document integrated by VANOC2010? Critical review and analysis are processes of identifying suppositions which are generally taken-for-granted by the general public, and methodologically supporting, or discouraging the acts (Wall, Stahl, and Salam, 2015). Critical review of qualitative data can comprise many methods, the most popular being participant observation, interviews, focus groups, and document review. Beyond these popular methods, others also exist, including mapping cultural settings and recording conversations (Letts et al, 2007). Critical studies are not assumed to be bias free, as the entire project is constructed and managed by individuals who are influenced by their experience, and exposure to the topic. However, the review and analysis of all components being analyzed should be consistent throughout in order to negate bias being placed on certain aspects of the study; therefore, avoiding being considered a bias review. “An analysis of a scientific paper might examine the methodology, accuracy, and relevance of the research (Sweeney & Hooker, 2005).” In the case of this study, this process was to examine the intent, accuracy, and relevance of the plans made by the Vancouver-Whistler Bid Corporation and the relevance of the decisions carried out by VANOC.

Informative sources and the references contained therein were mined for other potential resources. Providing numerous journals, textbooks, research studies, and
dissertations to manufacture a solid framework upon which to base this study. Searching through official reports of the IOC and online documents housed in the LA84 archives provided numerous facts associated with the bid process. These reports were also excellent sources of data and analysis to understand the decisions made by the Bid Corporation and how the ideology altered or maintained consistency with the Organizing Committee. The Urban Planning and Renewal initiatives integrated by VANOC2010 were observed through analysis of the Vancouver –Whistler 2010 Bid Corporations’ bid book submitted to the IOC on 10 January 2003. Analysis of the Bid book presented the intended urban planning and renewal projects of the Vancouver-Whistler Bid Corporation. Once the legacy projects were identified, the next phase of the project was able to begin. At this point, a three volume submission comprised of documents submitted at different stages of the OCOG was analyzed. This document consisted of the Bid Report submitted by VANOC2010 in November 2009, providing outlook prior to the Games; the Staging the Winter Games Knowledge Report submitted by VANOC2010 in September 2010, providing outcomes of the Games; and finally the Sustainability Report submitted by VANOC2010 for the year of 2009-10, highlighting the efforts made by the OCOG to ensure the lasting effect of the Games during that year. The findings from these reports outline the actual projects that were developed for use in the community. As well, the final three documents were used to establish the extent the organizing committee acknowledged the needs outlined in the bid book, and to what extent the bid book was adhered to.

For use in this study, the definition of Legacy builds off the definitions of Martyn (2016) and Cashman (2002); a legacy is anything which leaves a community in a better
or worse situation. Relative to this study, the legacies are actions taken that result in urban planning and renewal, therefore the projects being analyzed are identified as legacies, in addition to urban planning and renewal projects. Urban planning and renewal initiatives include: addressing the needs of disadvantaged groups; limiting neighborhood deterioration caused by increased crime, poverty and property deterioration (Anderson, 2004); improve property value; and improved environmental quality. The objective of this study was to determine if the urban planning and renewal initiatives for the Vancouver-Whistler 2010 Bid Corporation were integrated by VANOC2010 in their planning process for the 2010 Winter Olympic Games. Therefore, the study only observes the bid process from the time the Corporation was officially created in late-1997, until 2 July 2003, the date in which the formal vote took place in Prague at the IOC to select the host of the 2010 Winter Olympics.

For the purpose of this study, document review was the primary method to obtain data to analyze. The first phase of this study was a critical review, organizing the urban planning and renewal legacy projects intended by the Vancouver-Whistler Bid Corporation in the Bid Document. Each project was classified into one of the six pillars of legacy; this review and analysis recognized and utilized six pillars of legacy formed by Martyn (2016) and Cashman (2006): economic; environmental; sport; infrastructure; information and education; and public life, politics, and culture. For example, the Olympic Oval would be classified as infrastructure, since it is hard infrastructure built for use during the event. Also, legacy projects were deemed as an upgrade or new venture; highlighting whether the infrastructure was already in place and needing renovation, or was to be newly constructed for the event. In addition to this, each project’s future
ownership group and responsibilities for maintenance and funding post-games was highlighted.

These highlighted legacy projects only warranted analysis and discussion if they were deemed to be within one of the physical pillars of legacy. Further delimitations of this study are the documents being analyzed. The bid book provided by the Bid Corporation was the only document to be utilized to distinguish the intended legacy, urban planning and renewal projects. In comparison, the OCOGs’ three-volume document submission, was the source of data to determine the completion of the intended projects. With regards to qualitative data and research methods as a whole, although creating further parameters for this study would have been useful to ease the analysis phase of this study, over strategizing with ‘how-to steps’ could have undermined the trustworthiness of the study (Wallendorf & Russell, 1989). If too many delimitations are set prior to the review and analyzation phase, potential legacy outcomes could be ignored due to the distinct definitions, guidelines, and procedures of over categorizing. Many authors have questioned the idea of criteria, and state that forcing research to be identical or similar to other projects is producing works which are difficult to relate to by individuals or groups not directly affiliated with research similar to the case study; these authors typically recommend criteria to be more open and flexible, as rigid qualitative criteria too similarly resembles quantitative research methodologies (Bochner, 2000; Ellingson, 2008; Golafshani, 2003; Guba & Lincoln, 2005; and Schwandt, 2016).

The analysis phase of this study observed the projects based on: ideologies formed from specific definitions of Urban Planning and Renewal; the parameters of the timeline associated with the observation of the bid process; and who are the specific
stakeholders being assessed. These definitions and parameters were created based on the findings from literature. Ideologies, are aspects within society’s view, often taken for granted, providing some with an advantage and taking away from others, especially from within similar research domains. Ideologies can remain similar, focusing repetitively on specific areas of interest, demographics of groups or individuals, and regions of the community. Ideologies are not biased or false, however, to eyes generalized to the worldview and not the research communities, ideologies seem oversimplified and unglorified as a result of being removed from the scrutiny of ‘real life’ (Freeden, 2003; Hawkes, 2003). Simply, this means that unlike scholars, business leaders do not appreciate case studies as they are deemed difficult to overlay into different situations; every case is different, and none are completed within a vacuum.

After analyzing the productivity of VANOC2010 regarding their efforts to complete the stated objectives highlighted in the bid document by the Vancouver-Whistler 2010 Bid Corporation, this study determined: which legacy outcomes were achieved based on the definition of Urban Planning and Renewal used in this study, in particular which infrastructure projects have provided benefits for the community long-term. In trying to determine the success of VANOC and legacy infrastructure, success has been defined as accomplishing the intentions of the Bid Corporation. A fully successful piece of infrastructure would have obliged with all intentions of the Bid Corporation; in addition to being aligned with its values and overall vision. Simply because the plan changed with regard to infrastructure built, does not symbolize a failure of VANOC; a deemed failure on behalf of VANOC would have been the result of a facility not aligning with recurring themes, Urban Planning and Urban Renewal initiatives throughout the
literature. The long-term forecast of successful infrastructure legacy, was determined through the incorporation of additional literature, including models created by other scholars, organizations, or previous Olympic hosts. As this study occurred seven years’ post-games, this research is also granted the luxury of media outlooks relating to some discretionary perception towards the infrastructure and the affects they have had on the community. Thus, addressing the targets of the legacy initiatives on the decisions made by VANOC2010.

Available sources were searched as academic pieces of literature; media quotes; official reports submitted by the Vancouver-Whistler 2010 bid corporation, VANOC2010 the organizing committee, other recent OCOG’s and their official documents as well as their precursor bid books, various levels of government, and multiple sporting federations. These documents were obtained through database searches utilizing “Vancouver Olympic 2010 bid” and other similarly composed phrases. As information became available about the process of the bid and organizing for the 2010 Winter Olympics, the search parameters were expanded to include specific events, or projects. Database searches for ‘Urban Planning,” “Urban Renewal,” “Mega-Events,”” and “Olympics” in many variations, provided additional literature to better understand and propose definitions of the terms and history associated with bidding for Olympic games. As terms, ideologies, and frameworks arose, needing further exemplification or definition, searches of literature regarding these ideas were investigated utilizing the same process.
CHAPTER 4

RESULTS

In the following chapter, the legacy projects from the study have been presented and discussed. The projects were divided into groups based on the pillar of legacy that best describes their intentions to perform during the Games period. The sections are Primary Hard Infrastructure, Secondary Hard Infrastructure, and Tertiary Hard Infrastructure Projects; and Other Legacy Projects which are further divided into the sections titled Soft Infrastructure; Economic; Environmental; Sport; Information and Education; and Public Life, Culture and Politics Legacies.

Primary Hard Infrastructure Projects

In the following section, the primary hard infrastructure projects constructed or renovated by VANOC have been introduced. Listed according to venue name during the Games period, these 12 venues (see Appendix 1 & 2) are the pieces of infrastructure developed and constructed according to the Bid Report, the Staging the Winter Games Knowledge Report, and the Sustainability Report submitted by VANOC. Included in this section, for each individual piece of infrastructure, is the intent of the Bid corporation relative to the venues, followed by the final outcome as constructed by VANOC; impact the facility had on the community and region hosting the Games relative to Urban Planning and Urban Renewal. There are many instances VANOC complied with the Bid Corporations wishes, however, there are also several projects that greatly differ from or are not discussed in the Bid Book; these differences have been discussed, and motives for these alternative outcomes analyzed.
Vancouver Olympic Centre

Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book

As planned and stated in the Bid Book, the Vancouver Olympic Centre, formally named the Hillcrest/Nat Bailey Stadium Park, was permanent and newly constructed for the purpose of the 2010 Winter Olympics to host the competition events related to Curling during the Games. The facility was to be built in the municipal Hillcrest Park, planned to be owned and operated as a municipal building serving as a community sports centre, owned pre- and post- games by the City of Vancouver (Bid Book 2002 V2, 43).

After the Games, the facility was intended to incorporate a curling rink, providing a much needed community centre to the area; in order to replace an aging one. The new centre includes curling sheets, lounge and viewing areas, ice hockey rink, gymnasium, fitness and wellness centers, childcare, an arts area and multipurpose rooms. Another lasting legacy of this facility is sport development; it is the intent of Curl BC to adopt this facility as their home in conjunction with the Canadian Curling Association and the City of Vancouver, to draw more focus and publicity to the sport and achieve higher club memberships (Bid Book V2, 47).

VANOC Completed According to Final Documents

VANOC constructed this building according to plan, the final structure was built geographically as stated, with the usage post-games becoming a community sports centre as was outlined in the bid book. The total cost of the project was $40 million; $250,000 funded by the City of Vancouver, with the remainder equally funded by the Governments of Canada and British Columbia.
The new facility replaced the existing aged facility and was constructed on what was a gravel parking area. A part of the legacy conversion was the revegetation of the demolished site being replaced resulting in ‘net zero green space lost,’ and creating not losing outdoor play areas. Furthermore, environmentally, designs allowed the waste heat from the refrigeration systems of the curling sheets to be repurposed to heat other areas of the facility including the attached aquatic centre; other features relative to the aquatic centre include ultraviolet disinfection systems to improve indoor air quality, and screen walls rather than doors to improve accessibility for all individuals. (VANOC Bid Report 2009, 36; VANOC Sustainability Report 2010, 117).

In their post-Games conversion of this facility into legacy mode, the city of Vancouver was striving towards LEED Gold building standards and included a library, swimming pool, ice rink and community centre (Sustainability Report, 117).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The construction of this venue aligns with the overall motives of VANOC, the city of Vancouver and municipality of Whistler; the venue was designed and constructed to serve a need within the community post-Games. Post-Games, the venue was converted into a community centre and aquatic centre to replace the previous Riley Park Community Centre, Percy Norman Pool and fitness centre, and Vancouver Curling Centre. The new facility features a community centre, ice rink, library, fitness centre, games rooms, childcare facilities, and eight-rink curling club (Ray Ven Eng 2010; Condon 2012). The aquatic centre includes a 50-metre lap pool, leisure pool, outdoor pool, steam room, sauna, and hot tub (Condon 2012). Ian Robertson, NPA parks board
commissioner related to the need for change regarding the new community centre, ice rink, and pool:

“They all needed replacing. We would not have had these new facilities without the Games. (Thomas 2009)”

The facility is located in central Vancouver which puts it in a position of catering to the needs and usages of diverse populations; the users from the city, users from suburban areas of Vancouver, specialized groups, recreational users, as well as multiple age groups, abilities and skill levels. The old facilities being replaced were demolished in 2012, in an effort to develop and return greenspace to the park (Thomas 2009). Most recently, in 2015-2016 construction began in the park to expand the park and provide more recreational opportunities through the Challenger Baseball Diamond, and Synthetic turf surfaces. These recreational sport facilities are legacies provided by the Jays Care Foundation and FIFA Women’s World Cup respectively (City of Vancouver n.d. (1)), the urban renewal of this park was sparked by the legacies of the 2010 Winter Games, and these organizations were able to further the renewal and provide sport legacies for the community.

The Vancouver Olympic Centre was designed to incorporate wood throughout the facility as both a construction material and design element. Unfortunately, the wood was not sourced from BC mills, wood selection of birch and maple required wood sourced from Oregon, as the BC mills focus on spruce and fir (Monco 2014). This selection took away economic opportunity from the wood mills in BC and brought that business elsewhere. Although Oregon is relatively close to Vancouver and could induce future business between the two municipalities, it is unlikely new business will result.
Furthermore, the decision to not keep the economic benefits within the province and country of the Games, and within the province and nation funding the Games through community tax dollars, this decision was harmful to the economic legacy of these Games.

**Richmond Curling Centre**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As an already existing building requiring no renovations, the Richmond Curling Centre was intended to serve as the training facility for Curling during the 2010 Winter Olympics. During the Olympic Games period the entire venue was to be dedicated to curling training for the athletes participating in the competition. Owned and operated by the City of Richmond as a curling rink, the venue was proposed to hold the same purpose post-games (Bid Book V2, 43).

*VANOC Completed According to Final Documents*

VANOC followed the plan set out by the Corporation for this venue. The Richmond Curling Centre received no renovations and returned to normal duty after fulfilling the requirements as a training facility for the Games.

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The Richmond Curling Club did not receive any renovations, nor any reconstruction to the facility. The venue was simply a practice facility. Post-Games, the venue was returned to provide the same service it was tasked with prior to the Games, and continues to do so today. It is difficult to say if the Olympic Games had an impact, negative or positive on this venue or on the surrounding community of Richmond. The simplest influence was the displacement of curlers in the community as the rink was unavailable for use during the approximately two-week period of the Games. Some
supporters of the Games stress the importance of the events and rink usage to sport development, however, interest in Curling still remains low throughout the city. The community has struggled to attract major tournaments to the area, due to a lack of appropriately sized venues and lack of curlers (Morris 2014).

**Pacific Coliseum**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As planned and stated in the Bid Book the Pacific Coliseum, formally known as Hastings Park Pacific Coliseum, was an existing venue that hosted figure skating and short track speed skating events during the Games. The City of Vancouver currently owns the Commercial arena; however, the Pacific National Exhibition currently operates the arena. The intent was for this facility to remain the same post-games where the arena is still used for special events, trade shows, exhibitions, recreation and sport. Renovations were needed to the facility, and remain permanent today. The renovations included improved ice systems, the ability to incorporate international sized ice surfaces, improved spectator areas, as well as refurbished concessions and concourse areas (Bid Book V2, 75-79).

A restoration plan commenced in 1994 for Hastings Park and the renovations taking place for the purpose of hosting the Games, aligns with the urban renewal initiatives of the City of Vancouver in renovating community centre facilities to better serve the communities recreational and cultural needs.

*VANOC Completed According to Final Documents*

The Hastings Park Pacific Coliseum was renovated as outlined in the Bid Book at a cost of $20.4 million; the renovations were jointly funded by the governments of BC
and Canada. The ownership remains with the City of Vancouver post-games for usage as a commercial arena.

The work completed aligned with the restoration plan which began in 1994, replacing 16,000 seats which were auctioned off in a fundraiser, expanding the ice surface to international size, improvements to ice plants, washrooms, concession spaces, heating and cooling systems, as well as lighting; this included modifying and upgrading wheelchair accessibility to these areas of the facility. In an attempt to improve indoor air quality, equipment upgrades and energy efficient fixtures were installed. The renovations and modifications made to the existing arena were kept within its existing footprint, with zero additions to impervious land surfaces (Bid Report, 41-42); however, according to the Vancouver 2010 Sustainability Report 2009-10, “there was a minimal increase to the amount of impervious land surface on this project site” (Sustainability Report, 117).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

In an effort to maintain the natural beauty and environmental sustainability related to this venue, the footprint of the facility during construction was kept within the existing footprint of the previous structure. This resulted in less harm to surrounding land and kept the environment natural around the venue. One of the improvements included installing new seating to the arena. The work for this task, like at other various venues, was not completed by a local firm. In 2002, in a pitch to the Vancouver Board of Trade, Premier Gord Campbell said:

“Businesses that get involved early do the best, public-private partnerships will be ‘numerous’. I need everyone in the private sector interested in the
Olympics to remind people about the jobs that will be created and the opportunities it will create. (MacLeod 2008)”

In some instances, there are situations that require expert firms to install or contribute to a task that local business cannot provide; however, in this case, replacing seating was given to a firm from Michigan instead of providing economic stability to local business (MacLeod 2008).

The Pacific Coliseum was the home of the Vancouver Giants CHL franchise since 2001, and prior to that the original home of the Vancouver Canucks. The Coliseum has found itself ‘breaking even’ during hockey season, unable to turn profits due to blackout dates. According to a quote from Laura Balance, spokesperson with the PNE, the Giants decided to utilize a new arena starting in the 2017 season. Although the quote is from prior to the start of the 2017 season, and despite lacking permanent tenants, operators of the Coliseum are not overly worried:

“What the Giants’ departure will allow us to do is do more of the commercial type of activity that we do when we don’t have the Giants season on. The Giants were never a net revenue generator for the PNE, and so this will allow us to actually generate more revenue from that building. (Chan 2016)”

Vancouver is one of three cities which contains two tier-one sports arenas in Rogers Arena and the Coliseum; the other two are Edmonton and Quebec City. Toronto, in addition to the Air Canada Centre contains the Ricoh Coliseum, which has never had ties to an NHL franchise; and the historic Maple Leaf Gardens which was converted to serve public needs as a Loblaw’s supermarket and athletic complex for Ryerson (Chan
Again, according to Ms. Laura Blanco, operators of the Pacific Coliseum believe it is important for large municipalities to have adequate entertainment venues for attractions to be hosted in their cities:

“It’s great for Vancouver to have a secondary tier one venue to host all of these other events and attractions that want to come to our city. Not a lot of cities have multiple large venues to facilitate the activities that happen. (Chan 2016)”

**Trout Lake Centre**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As discussed in the Bid Book, the original plan was to utilize a different already existing structure, the Hastings Park Agrodome, as the training venue for figure skating. The Hastings Park Agrodome, owned by the City of Vancouver and operated by the Pacific National Exhibition is used as a commercial arena. The facility required permanent renovations including a larger ice pad, improvements to dressing rooms, and advancements regarding mechanical, electrical, and refrigeration systems. The facility remained a commercial arena in the post-games era (Bid Book V2, 75).

*VANOC Completed According to Final Documents*

Instead of utilizing the Hastings Park Agrodome, VANOC deemed it worthwhile to permanently renovate the existing Trout Lake Centre ice rink to serve as the figure skating training venue during the Games. The post-games owner is the City of Vancouver, and the venue has continued to act as a community sports and recreation centre. The City of Vancouver achieved LEED Silver green building certification for this facility. The community centre attached to the ice rink was planned with the potential to
be rebuilt in the post-Games period. Following demolition, the building components and mechanical equipment were relocated for use at other parks and recreation facilities in Vancouver. For every tree removed during construction, two new trees were planted around the venue, as well, tree stumps were provided to metro Vancouver for local stream restoration projects. Also, heat generated from the ice rink refrigeration system is being reused for heating the facilities domestic water supply (Sustainability Report, 118).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The land preparation related to the Trout Lake Centre was environmentally sustainable to the venue property as regional stream restorations. Every tree removed in site preparation resulted in two trees replanted on the venue site; waste stumps and roots were provided to metro Vancouver for stream restorations in the local area. This minimization of lost green life to the area, and usage of natural materials local to the area ensures natural beauty and environmental sustainability, as well as urban planning and renewal in the municipality of Vancouver.

The venue selection is aligned with the need for a new community centre in the area, or renovations to the existing centre to align with community demands. In the Sustainability Report on page 118, VANOC distinguishes the steps taken as:

“redevelopment of an existing public ice rink attached to an existing community centre; the community centre will remain as such until 2010, with a potential rebuild planned for the post-Games period.”

In turn, this decision to utilize and replenish the needs of this Centre is urban planning and urban renewal, and a great way to exploit the Olympic Games to accomplish the needs of the community. The generic generalization of potential events, however, is
detrimental to communities because the wording is generalized to leave organizations making promises avoid accountability and liability. The renovation post-Games included minimizing the size of the rink from international size to NHL size, and renovating the community centre to include a gymnasium, performing arts studio, day care, and multi-use rooms (Grand View Skating Club n.d.; Lynch 2012). The community including the Ruth and David Group, as discovered in the quote below, is enthralled with the community centre and what it has provided:

“The community center is now a gem of East Van and an architectural marvel. As people who live in the neighborhood, we know it’s a fabulous place for personal health and community connection.”

In a description of the park, after the renovations and reconstruction projects surrounding the community centre and the park it is housed in, John Hendry Park, is deemed an oasis within central Vancouver by Rebecca Bullitt (2013) in her community blog:

“Getting into the water isn’t even the main draw for those who enjoy Trout Lake. It’s the Farmers Market, the off-leash beach, ballparks, picnic areas, and the adjacent community centre.”

Although it came at a financial cost, the park has been completely transformed to be a welcoming area for citizens and tourists alike, providing beauty and usage to the neighbourhood it is located in.
**Killarney Centre**

*Intent Based on the Vancouver–Whistler 2010 Bid Corporations’ Bid Book*

The Killarney Centre was not the original plan to act as the training venue for short track speed skating, similarly to the Trout Lake Centre and figure skating. As planned in the Bid Book, a temporary facility was to be constructed in Hastings Park (Ch. 7 pp 69).

*VANOC Completed According to Final Documents*

Instead of constructing the new temporary facility in Hastings Park, VANOC opted to permanently renovate the Killarney Centre ice rink attached to a community centre and public aquatic centre, as the training venue for short track speed skating. Post-games, the City of Vancouver retained ownership and renovated the centre to serve as a community sports and recreation centre, the aquatic centre was unaffected and unchanged by these renovations. In an effort to divert construction waste from landfill, old concrete block walls serve as structural fill for the new rink, and several older building components were relocated to other parks and recreation facilities in Vancouver. This facility was awarded LEEDS Gold Green Building Standards, some reasons why include water-saving dual flush toilets in the washrooms at the venue, and utilizing heat generated from ice refrigeration systems to warm spectator viewing areas, change rooms, the concourse, and preheat water for the pool (Sustainability Report, 119).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The land preparation related to the Killarney Centre was environmentally sustainable through diversion of waste building materials from landfill, by repurposing the material for use in the construction of the new venue. Every tree removed in site
preparation resulted in two trees replanted on the venue site; as well when possible reusable components of mechanical equipment was relocated to other community centres who could repurpose it. The minimization of lost green life to the area, and the limited addition of waste to landfill has resulted in environmental sustainability.

The venue recently underwent a construction project prior to selection as an Olympic venue adding an aquatic centre to the facility. The facility remained unaffected in the renovations, however, a lobby and hallway now connect the aquatic centre, ice rink, and community centre as one (Green Building Brain n.d.). The renovations were much needed to this centre, as the rink was fifty years old and in need of revitalization (Vancouver Green Capital n.d.); rebuilding the new rink and lobby area over the existing footprint of the prior rink, limited the loss of green land around the venue. The multi-purpose lobby can be utilized as a social gathering place and event centre when not being utilized by the athletes as well (Green Building Brain n.d.), providing the venue many avenues to remain relevant and useful to the community.

Cypress Mountain

Intent Based on the Vancouver - Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, Cypress Mountain would be the venue to host freestyle skiing and snowboarding. The venue already exists; however, renovations were necessary for the events. Cypress is owned and operated by Cypress Bowl Recreation Ltd. Partnership (CBR) which holds a long-term lease to operate the ski area from Cypress Provincial Park, and retained ownership of the venue with the intent to continue utilizing the property as a commercial ski area. Cypress has the second highest skier/snowboard visits in British Columbia to Whistler/Blackcomb (Bid Book V2, 113-115-119-121).
The renovations to Cypress have made the terrain more skiable without having negative environmental effects. The course, obstacles, and jumps were to be established and designed to meet specifications of other events, to serve as a potential host pre- or post-games. Lighting was installed along the aerial site, half-pipe, and parallel giant slalom runs allowing flexibility for event and television scheduling (Bid Book V2, 115-121).

The lasting legacy of this venue will be to host future events consisting of world cups and championships of IFs in the Olympic Games and other sports including but not limited to extreme sports (Bid Book V2, 117-123).

**VANOC Completed According to Final Documents**

VANOC renovated Cypress Mountain the way the Bid Book envisioned, and utilized the venue for the freestyle skiing and snowboarding events. CBR maintained ownership and continues to utilize Cypress as a Commercial ski area. The renovations were completed in November, 2006 at a total cost of $9.8 million covered by grants provided by the Governments of Canada and British Columbia.

During the construction phase, there was a focus on utilizing local workers and construction firms on this venue. First Nations worked with BC parks to ensure a lasting legacy at Cypress post-Games, as well as on an Archaeological Overview Assessment. Aboriginal art was installed at the venue as part of the Vancouver 2010 Venues’ Aboriginal Art Program. The site selected utilized an already existing ski area for snowboarding events, and a recently harvested forest within Cypress Mountain ski area minimizing the environmental impact and redeeming the economic benefits of the tourism already in effect (Sustainability Report, 117). To minimize the environmental
impacts further, during the construction phase VANOC, Cypress, and other stakeholder members salvaged and relocated wetland plant species from snowmaking reservoirs to unaffected wetlands nearby (Bid Report, 37).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The construction process of the Cypress Mountain venue was a unique legacy in itself. It was one of the venues which provided local employment opportunities for contractors, construction businesses, and the FHFN. The environmental legacies of reusing wood waste, relocating native species of plants to natural habitats, and implementing energy efficient processes in snow making ensured the natural beauty of the land into the future.

The construction projects which took place at Cypress, set the stage for the events to have a primetime feel for broadcasting corporations with lighting on runs to allow evening and night competition. This gave great satisfaction to Canadians when the first medals awarded to Canada were silver and gold at this venue; however, aside from these nostalgic improvements the renovations strictly benefited CBR. With the Alpine discipline ski events held at Whistler Creekside, and the Whistler Sliding Centre located at the base of Blackcomb, the freestyle events could have easily been hosted in Whistler (Chan 2013). The climate difficulties associated with Cypress throughout the Games of warm temperatures and lack of snow, which affected practice, competition, and spectating capacities, would have been a non-factor in the RMOW. With that being said, the increased infrastructure at Cypress and opportunities created through 2010 Legacies now, many individuals have been afforded the opportunity to ski and snowboard at Cypress that they may not have received if Whistler was awarded the venue for these
sport disciplines. Through the Aboriginal Youth Sport Legacy Fund and 2010 and Beyond, two programs were created to make skiing and snowboarding more accessible to youth from lower socio-economic backgrounds; Canada’s First Nations Snowboard Team and Chill are two programs to encourage this participation amongst youth (Ulen 2011).

**Canada Hockey Place**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporation’s’ Bid Book*

As stated in the Bid Book, Canada Hockey Place, formally known as General Motors Place was intended to host the Events for hockey during the 2010 Winter Olympics. The venue, owned and operated by Orca Bay Sports and Entertainment pre- and post-games is a commercial arena, that is home to the Vancouver Canucks National Hockey League (NHL) franchise, the Vancouver Ravens (NLL Lacrosse), and the Canadian Centre of Excellence (Bid Book V2, 49-53). The venue had the potential to be and was intended to be renovated to incorporate a larger International-sized ice rink in comparison to the smaller NHL size rink, removing three rows of seats to make room for wider ice sheets (Bid Book V2, 53).

*VANOC Completed According to Final Documents*

VANOC utilized Canada Hockey Place the way the Bid Book outlined, hosting the events for Ice Hockey during the 2010 Winter Olympics. Orca Bay Sports and Entertainment maintained ownership of the venue post-games; the arena name formally changed from General Motors Place to Rogers Arena in the post-games era, however, the arena is still home to the Vancouver Canucks and acts as a commercial arena.

Leading up to the construction phase for this venue, VANOC was able to negotiate with the International Ice Hockey Federation (IIHF) and IOC to allow play to
occur on the North American sized ice surface already in place in all arenas. This limited the necessary renovations to constructing additional locker rooms. The spectating capacity during the Games is 19,300 (Bid Report, 39); aboriginal art was also installed at the venue as part of the Vancouver 2010 Venues’ Aboriginal Art Program.

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

In comparison to the 2006 Winter Games in Torino, and the 2014 Winter Games in Sochi, the 2010 Vancouver Winter Games was planned to be conservative in spending and building; in turn, it was generally minimalistic in terms of ‘needs’ for the Games, utilizing many facilities that already existed within the municipalities, and building new infrastructure that would benefit the community post-Games. With the inflating construction budgets, and demands around the globe, the Vancouver Olympics was designed to construct only what was needed to host the Games, and not much more. One way the budget remained grounded was utilizing already existing infrastructure and working with IF’s and the IOC to lessen the requirements for each sport disciplines’ infrastructure, to minimize the renovations needing to take place for a time frame so short in duration as the Games. In this case, Canada Hockey Place required renovations to occur twice, once to obtain Olympic sized ice sheets, and one to return to the North American sized sheets. Avoiding this cost of approximately $10 million in renovations plus the gained potential for 800 additional seats per game is colossal (CBC Sports 2006). Not only is the cost of this project high from a financial sense in terms of human and construction resources, the price is high on resources and its effect on the environment with extra water and energy needed for the increased rink. The ability to interact with the governing bodies and implement a decision to minimize these changes and utilize the
resources already available is what made this venue a successful project, in the words of Renee Fasel, IIHF president:

“I say it very honestly: It would be stupid to spend so much money to make this construction. (CBC Sports 2006)”

The Rogers Arena post-Games has continued to be a venue drawing crowds and attention to Vancouver. Ranging from concerts, to sporting events of all levels, the arena is still considered by many to be the premier venue in Vancouver, drawing bigger events more frequently than the publicly owned BC Place (Levac 2014).

**UBC Thunderbird Arena**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, UBC Thunderbird Arena, formally known as UBC Winter Sport Centre was to be a permanent, newly constructed facility to host hockey events for the 2010 Winter Olympics. The ownership group was intended to be the University of British Columbia (UBC) with the venue serving as a community and university sports centre post-games. As such a highly acclaimed institution, and providing the largest intramural program in Canada, UBC had a need to replace their out of date arena.

The facility planned to seat approximately 8,000 spectators during the Games, however, a portion of those seats were temporary, with approximately 5500 seats remaining permanent. UBC proposed to contribute $3.2 million to payment of capital costs of this arena, as a lasting legacy of this facility is to provide recreational, research, sport development, and entertainment opportunities for the university in both winter and
summer sports. It is the intent of Hockey British Columbia to enhance and relocate the Canadian Centre of Hockey excellence to this new facility at UBC (Bid Book V2, 49-51-53).

**VANOC Completed According to Final Documents**

The UBC Thunderbird Arena was completed by June, 2008 the way the Bid Book outlined, with VANOC contributing $38.5 million towards the construction costs and UBC responsible for the remaining costs. Ownership remained with UBC as a community and university sport centre. The spectating capacity during the Games was 6,800.

This facility targeted building standards equivalent to LEED Silver, with an attempt to redevelop, refurbish and reuse components from the existing structure. One example was reusing waste heat from the ice plant, used to heat building and domestic water throughout the facility (Bid Report, 39); however, although these renovations were completed as mentioned, in the Sustainability Report on page 118 it stated that “This venue incorporates green building design to a level that is comparable to a highly sustainable industry practice for sport facilities.” As well, the space was designed to provide flexibility to the facility to accommodate many uses (Bid Report, 39); including incorporating Plexiglas boards required for sledge hockey in two arenas, making it the only arena in Vancouver accessible to sledge hockey teams. Aboriginal art was installed at this venue as part of the Vancouver 2010 Venues’ Aboriginal Art Program; in addition, a large thunderbird carving, created by Direction 7 from the Musqueam Nation was installed and hangs at the entrance to the arena (Sustainability Report, 118).
How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The construction of this venue aligns with a need in the community, specifically a need for UBC. From a budgetary perspective, this facility is one of the only privately owned facilities which had to contribute financially to the development or construction of the venue (Bid Book V2, 133). The costs associated with building this facility were split between the university and VANOC which is beneficial to both the taxpayers who are funding VANOC through grants provided by the three levels of government and the university not having to pay the full cost of a facility they need. This facility acts as a bridge between the two entities providing further learning opportunities for the university, specifically their Human Kinetics program, and VANOC, additional insight and services for documents and reports.

Environmentally, all buildings constructed by the City of Vancouver or VANOC were attempting to achieve LEED building standards. This facility is not owned and operated by VANOC or its subsidiaries and therefore was “built to incorporate green building designs comparable to sustainable industry practice,” but did not meet LEED standards. Some is better than none in this sense, however, the cutbacks on certain buildings VANOC was not responsible for draws skepticism and seems as a ploy to rid themselves of the accountability of not willing to accumulate the extra costs associated with achieving LEED building standards on all structures associated with the Olympics.

The UBC arena came under scrutiny as it had to eliminate minor hockey programs and other recreational programs during the refurbishment and construction processes. The university announced they would do their best to accommodate some
programs and re-open the minor hockey league upon completion (Mr. X 2007). The UBC arena holds nostalgia in the Canadian National Hockey team scene, the original arena is deemed the home of the first Olympic Hockey Team in 1964 under coach Father David Bauer (UBC- first national team). The ability to renovate and incorporate this existing arena, to provide historical significance, was a way to incorporate the past into the future.

**Britannia Centre**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As outlined in the Bid Book, the Training Centre for hockey was between two potential municipal venues, the Trout Lake Centre and Killarney Centre. Both Community Centres were in need of renovations from their existing condition to act as the training facility for hockey during the 2010 Winter Olympics. Current ownership of both facilities, the City of Vancouver, use the facilities to serve the public as a community sports centre. Due to considerable amounts of consultation amongst the city of Vancouver, at the time of publishing the Bid Book, a decision was not made as to a training facility (Bid Book, 51).

*VANOC Completed According to Final Documents*

VANOC chose to alter the plan that was discussed in the Bid Book, and decided to renovate the Britannia Centre to be the training facility for hockey during the Winter Olympics. The City of Vancouver owned recreation centre remained with the City of Vancouver and does serve as a community sports and recreation centre. The renovations made to this facility, enabled it to better provide for, and serve community needs. Aboriginal art was installed at this venue as part of the 2010 Vancouver Venues’ Aboriginal Art Program (Sustainability Report, 118).
How Does this Impact Urban Planning, Urban Renewal, and Legacy?

As was discussed earlier, the Trout Lake and Killarney Centre received the much needed upgrades that were discussed in the Bid Book. The Britannia Centre was developed and renovated to better provide opportunities for the residents of this community and the users of this facility. This directly complies with the terms urban planning and urban renewal. Although many in the community were opposed to allowing use of the Britannia Centre by the Olympic Games, as seen below in quotes from local residents in Dawn Paley’s ‘Britannia Board Moves Forward with Olympic Plans’ newspaper article (2008) while the decision was being voted on to use the Britannia Centre:

“[VANOC’s proposal] fails to clearly address two major community concerns: security and the accompanying surveillance apparatus and service disruption of both Britannia and community. (Tammie Tupechka, local resident and former board member at the centre)”

“The majority of people in the Commercial Drive area are against the Olympics. (Garth Mullins, Olympics Resistance Network)”

Garth Mullins also voiced concern that if Britannia is used as an Olympic site, it could double as a platform for staging crowd control measures, citing the increased police and military presence agreed to by VANOC and levels of government:
“We’re in the middle of a box, with Olympics venues on all sides of us. This place is going to be crawling with police officers no matter what we decide tonight. (Anonymous board member)”

It also demonstrates how the high demands of the Olympic Games can act as a platform for needs in a community to be achieved, with money and resources more readily available to contribute to the revitalization of infrastructure and communities:

“We are in a struggle to find the money to make improvements,

(Anonymous Britannia Centre Board Member, in favour of passing vote)”.

The executive director of the Britannia Centre, Enzo Guerriero, and CEO of VANOC, John Furlong, emphasized the proposal to utilize the Britannia Centre as a practice rink during the Olympics was created by the Britannia board members and sent to VANOC. In return the community centre would receive $370,000 in much needed improvements. This decision and venue selection was one which was targeted and extorted by community members opposing the Olympics in Vancouver. Through an attempt to pressure candidates running for city positions in blogs and community council meetings, the opposition demanded a change to the agreement of use of this venue for the Olympic Games (Paley 2008).

**Richmond Olympic Oval**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

The Richmond Olympic Oval was not the originally planned venue for hosting speed skating during the 2010 Winter Olympics. As stated in the Bid Book, the original venue to host speed skating was to be a newly constructed permanent facility on the Simon Fraser University (SFU), for SFU to own and operate post-games. The SFU Oval
was intended to provide a community and university sports centre to the community of Burnaby similarly to how the UBC Thunderbird arena would to UBC (Bid Book V2, 63).

SFU is integral to the community of Burnaby and this facility will provide recreational opportunities to the university and community alike. The multi-purpose facility will house a 400m track, in addition to incorporating equipment for summer and winter sports. The training and environmental technology built into this facility was intended to make this a superior facility into the future. The land is owned by SFU, and in addition to the land SFU would contribute $3.2 million towards capital costs (Bid Book V2, 65).

The lasting legacy of this facility is sport development; development of both speed skating disciplines at the university, community, and elite levels. The BC Skating Association and Speed Skating Canada are working to establish a high performance centre in this new facility to garner club membership and prolonged use of the speed skating facilities. In addition to speed skating, figure skating development in conjunction with the Centre for excellence and Skate Canada was a focus in this facility, in an effort to develop high performance athletes, coaches, and officials (Bid Book V2, 67).

This facility was to benefit from the Endowment Fund created by the Governments of Canada and British Columbia, to cover maintenance and management costs related to the facility to ensure the condition of the venue remain high for usage. The other venues to benefit from this fund were the Whistler Nordic Centre, Whistler Sliding Centre, and the Athletes’ Centre. The fund is worth $71 million. The Whistler Legacy Society is responsible for the management of the fund, and consists of members
from the governments of Canada, BC the Lil’wat and Squamish First Nations, Whistler, the COC and CPC (Bid Book V2, 67).

*VANOC Completed According to Final Documents*

Instead of constructing a facility on the SFU campus due to ‘significant cost and construction challenges’, a different site was selected in Richmond, on the banks of the Fraser River. This resulted in the $178 million Richmond Olympic Oval being built by the city of Richmond and VANOC, who contributed $60 million from the governments of Canada and BC, to be the venue to host speed skating during the 2010 Winter Olympic Games, differing from the Bid Book. Post-Games, ownership and maintenance responsibilities of The Richmond Olympic Oval were given to the City of Richmond, to best provide services and opportunities to the local community.

The facility through planning, was built on a site that was already disturbed and the construction of the facility has provided aid to redevelop the community around it; the facility was flexibly designed to allow for multiple forms of usage containing the anti-doping laboratory during the Games period, and transforming into a community health and recreation complex post-Games. Federal environmental assessments on the property were reviewed and the facility targeted LEED silver building certifications. During site preparation, all hardwood trees forested were put into storage and salvaged into paneling, flooring, landscaping features, or other furnishings in the facility; any trees removed during this process resulted in a two to one replacement surrounding the venue and local parks after construction.

In another effort to reuse local wood, the roof on the facility was constructed using BC wood damaged by pine beetle infestation. Further environmental technology
integrated within this facility include heat recovery, using waste heat from the refrigeration plant for ice melting, hot water, and heating cooling systems; and storm water initiatives, including the development of wetlands to collect rainwater, to be used for irrigation and toilet flushing (Bid Report, 44). Aboriginal art was installed in the venue as part of the Vancouver 2010 Venues’ Aboriginal Art Program, the Oval’s rainwater collection system incorporates Musqueam Nation artist Susan Points’ design of Coast Salish, with the water running over the design on concrete buttresses (Sustainability Report, 118).

A major discrepancy throughout the Bid Book occurs relative to the Endowment fund which was renamed the Games Operating Trust by VANOC. On page 67 of the Bid Book it stated that the SFU Oval would benefit from being part of the endowment fund; however, on pages 85 and 93 in the Bid Book, it mentions the Athletes’ centre not the SFU Oval. This may have been an error based on the timeline of the Bid Book being completed over many months, with the SFU Oval not being constructed and being replaced by the Richmond Olympic Oval. Due to the change in those venues and agreements made between VANOC, the city of Richmond, and the province of BC, it is likely the Athletes’ Centre, replaced the SFU Oval and the change was overlooked on page 67.

**How Does this Impact Urban Planning, Urban Renewal, and Legacy?**

The location change from SFU to Richmond for this venue may have been negative to SFU, however Richmond has seen the positive effects of this venue already. In the site selection alone, Richmond as a community was once a rural and disconnected town, with the specific waterfront property built on being utilized for industrial purposes
(Wood 2014). The overhead cost of the facility is zero as the facility and post-Games conversions were paid for by the sale of surrounding plots of land to corporations with the intent to grow the area (Gold 2013).

A result of the Olympic Oval and Canada Line stretching to Richmond, leaves the city closer and more accessible than ever to Vancouver. Some locals, including Michael Hungerford and Alexa Loo, believed the community would soon be similar to downtown Vancouver and other surrounding areas with better attractions to draw people into the town and keep them there:

“Richmond will be a bustling, vibrant place to work and live and play right on the water, with all of these new 15-storey buildings with schools, and all [the] amenities you see in downtown Vancouver. That is the future. The thing that’s exciting about my industry and being in this place that has great fundamental growth behind it, is this will happen in our generation. In the next 20 years, we will see massive change. Just like Yaletown and Surrey and Metrotown. Richmond is the next. (Michael Hungerford, Richmond resident and local business owner; Gold 2013)”

“The Olympics and the Oval put us on the map to the rest of the world. Being able to host the games right here really brought the magic of the Olympics front and centre to the families and kids and people of Richmond, (Alexa Loo, 2010 Olympic Snowboarder and Richmond resident; Wood 2014);”
Municipal leaders are taking most of the credit; Terry Crow, Richmond’s manager of policy planning highlights below, the plan of the community was to revitalize the area and not have a secluded venue:

“This is all on purpose. The goal was to not make the Oval a box in the field and have all this parking around it. In creating an urban community, we wanted people to live and play in the area, and be able to walk. (Gold 2013)”

Furthermore, beyond the topic of seclusion, quoting Malcolm Brady below, the Oval has attributed to an increase in economic prosperity as well:

“This report is a testament to the ongoing legacies of the 2010 Olympic Games and the Richmond Olympic Oval for our community. The City’s investment in the Oval continues to generate huge social and economic benefits for Richmond (City of Richmond 2017).”

Although the effects have been good with the facility providing what the community wished to its citizens, some opposed the construction of a permanent facility including Chris Shaw, citing reasons such as a high cost, because they deem the land more valuable than the structure:

“Did the average person in Richmond benefit or was it just the developers because they got to build the stuff? I don’t know the answer on that one. I suspect the latter. (Wood 2014)”

As evidenced further by Wood (2014), other critics including Bob Ransford, a communications consultant and Rob VanWynsberghe, UBC professor and author of 2010 Olympic Games Impact Study for the COC, question the decision making process of this
venue and generalize the venue decision making process relative to the Olympic movement:

“Everything I thought would come true has come true. It’s costing taxpayers millions of dollars to keep the doors open there. I don’t believe it’s providing that kind of value, the land under it is worth more. I think the process of how it was made behind closed doors without any real collaboration with the public about what the future after the Olympics could be for that Oval was wrong. (Bob Ransford)”

“The literature is consistent. If you get the games, this will go down. It’s almost inevitable that decision-making processes get altered for the worse. The problem is the precedent is set for undemocratic decision making. (Rob VanWyrsberghe)”

These quotes regarding the decision making process lacking community input goes against the collaborative planning mentality originating from the Vancouver-Whistler Bid Corporation, and ignoring the recommendations of including CPT in any planning process.

The Oval was designed with adaptability in mind; the multi-use nature of the building has provided the capabilities of the Oval to be converted into an International Centre for Sport and Wellness, acting as a community gathering space with community, social and recreational spaces conglomerated with sport medicine, management, and high performance training facilities (Canadian Architect 2009). The construction of the Oval has brought sporting excellence to the community.

Unfortunately, the increased sporting excellence was not in the form of
professional competition equivalent to the level of competition showcased at the
Olympics or World Championships in long-track speed skating, however, there have
been numerous levels of competition from other sports. This shows the capabilities of this
multi-use facility since the long-track speed skating surface was covered to allow for the
purpose of multi-use surfaces and areas. Malcolm Brodie was quoted in Wood’s (2014)
article addressing the long-term sustainability of the venue will depend on usage, with
long-track speed skating not likely to return to the Oval because of costs associated with
transforming the surface to and from the long-track oval. Rob VanWynsberghe in the
same article informs the audience why the Oval will succeed regardless of Long-track
speed skating, as well as existing structures in Calgary which are in good condition:

“It would have to be on the caliber of the world championships for us to
do. The possibility exists but I don’t see it happening, (Malcolm Brodie,
Mayor of Richmond)”

“It’s ability to be converted is going to make or break it. The ability to be
able to use that as a facility for all these people probably means it’s going
to work out, (Rob VanWynsberghe).”

The Richmond Olympic Oval also emphasized accessibility for all. The
repurposing of the facility has resulted in more traffic in Paralympic training and sport.
The facilities future use as a multisport and wellness facility incorporates para sport, and
persons with disabilities. This is evident by comments made by Gail Hamamoto,
executive director of BC Wheelchair Sports Association while communicating his
thoughts on the financial contribution from the Government of BC through BC
Wheelchair Sports to establish the Paralympic component of the Richmond Olympic
Experience (ROX). These comments were documented in the Ministry of Community, Sport and Cultural Development’s (2014) news article ‘Richmond Olympic Experience to Create New 2010 Legacy’:

“BC Wheelchair Sports is pleased to contribute to the development of the Paralympic component of the Richmond Olympic Experience. The Richmond Olympic Oval is a valued hosting partner for national and international events in wheelchair sports and a training centre for our Paralympic athletes, as well as the next generation of wheelchair sports participants. We are very excited about this opportunity to enhance awareness of the Paralympic movement and share the incredible stories of Canada's Paralympians. Thank you to the Government of BC and the City of Richmond for their support of this incredible project.”

**Whistler Creekside**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the plan was to utilize two venues for skiing. The first being Whistler Creekside for Alpine Downhill, Super G, and Combined Downhill events. This is an existing venue that needs renovations to better tolerate the number of spectators as well as produce the highest quality sport competition relative to the Olympics. The venue was owned by Intrawest and is used as a commercial ski area; Intrawest will remain the owner beyond the Olympic Games, using the venue for the same purpose (Bid Book V2, 105-109).

The second venue proposed to be utilized was Whistler Blackcomb. The already existing venue needed renovations to better equip the property to handle the stresses of
the Games listed previously in order to host the events for Alpine Giant Slalom, Slalom, and Combined Slalom. Lighting is one of the renovations being added to the runs, to provide flexibility for television coverage and event scheduling. The owner of Blackcomb was also Intrawest, which held a long-term lease with the provincial government to operate Whistler/Blackcomb ski area; and utilize this property as a commercial ski area, also retaining ownership and purpose in the post-games era (Bid Book V2, 105).

**VANOC Completed According to Final Documents**

Instead of the proposed two venues in the Bid Book, VANOC elected to use one—Whistler Creekside. Under the ownership of Intrawest post-Games, Whistler Creekside has continued to be utilized as a commercial ski area, the property needed renovations to better handle the crowds and represent Olympic sport standards effectively. The renovations were to remain permanent post-games, to the benefit of Intrawest, and the venue would host all six events previously mentioned.

Creekside renovations were completed in Fall 2007, at a cost of $27.6 million. Local employment, purchasing, and contracting was emphasized on this project; the renovations included increased venue spectator capacity, however, the capacity was lowered through the planning process to align with parking, roads and highways, and environmental capacities surrounding the venue. The minimal renovations are a result of smart site selection, utilizing existing ski trails; infrastructure, including buildings, chairlifts and gondolas; and reusing all chipped wood waste on site. Significantly less vegetation was removed, resulting in less economic impact. (Bid Report, 34).
Alignment changes to men’s and women’s race courses were made to lessen the impacts on vegetation and streams crossing the runs. The top layer of soil was removed, stockpiled, and then replaced after the grading of the property. The wood waste from the land preparation was chipped and reused on-site (Sustainability Report, 116).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

With the post-Games use of this facility being utilized as a commercial ski area, the facility did not provide as much accessibility-for-all to the ski trails as some other venues used for the Olympic Games. However, this venue still continued to provide sport opportunities to recreational and elite users. The Olympic rated courses have drawn tourism interest, and hosting opportunities to the area of Whistler for years to come. In the Bid Book, the use of two venues for Alpine Skiing events was discussed and later VANOC opted to utilize strictly Whistler Creekside. With this decision, VANOC chose to renovate only one venue, minimizing the costs associated with these sports. The legacy, urban planning and renewal success of that decision is dependent on if they decided to renovate the venue needing more, or less work. If more, this provides more encouraging outcomes for the community long-term; if less they opted for the cheaper option and fewer positive outcomes for the community. Whistler Creekside consisted of the ‘Dave Murray Downhill’ run, and as a result of previous competitions already had renovations completed thereby enabling it to host World Cup Skiing events. The renovations completed to host the Olympic Games, and the decision to utilize Whistler Creekside, aligned with the usage requirements of both venues; and enables Whistler to host future events at Whistler Creekside and remain a leading venue in the world (Whistler Blackcomb n.d.).
Prior to adjustments being made on the ski runs, environmental assessments were completed, as on every host site, and adjustments were made to original designs to lessen the impact on the environment. This included minimizing the re-routing of streams, and development of water crossing structures.

**Whistler Olympic Park**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, The Whistler Olympic Park, formally known as the Whistler Nordic Centre, was to be a newly constructed permanent facility built by VANOC for the purpose of hosting the Biathlon, Cross Country, Ski Jumping, and Nordic Combined events during the 2010 Winter Olympics. The property owner of the land the facility was built on is the Government of British Columbia, with the Whistler Legacy Society (WSL) obtaining ownership of the facility pre- and post-Games; the facility usage was intended to be a public partnership Nordic Centre.

The Cross Country course has been situated in an area where the terrain varies greatly from soft rolls to steep hills; this fluctuation allows the course to adapt with the sport needs in the future (Bid Book V2, 81). As well the property allows for optimal television production and sport promotion. The terrain accommodates the Ski Jumping infrastructure well, as the terrain naturally allows for accommodating any jump heights relative to current and future events (Bid Book V2, 89).

The planned post-games usage of the Whistler Nordic Centre was to create an accessible world class destination for all Nordic Sports, while still maximizing the year-round usage of the land through outdoor recreation such as mountain biking and walking trails. Sport development was the intended legacy of the facility, providing opportunity
for international and domestic high performance athletes to train and compete. This facility was subject to benefit from the Endowment Fund created by the governments of Canada and British Columbia, to cover maintenance and management costs related to the facility to ensure the condition of the venue remain high for usage. The other venues to benefit from this fund were the SFU Oval, Whistler Sliding Centre, and the Athletes’ Centre. The fund is worth $71 million. The Whistler Legacy Society is responsible for the management of the fund, and will consist of members from the Governments of Canada, BC the Lil’wat and Squamish First Nations, Whistler, the COC and CPC (Bid Book V2, 85- 93- 101).

_VANOC Completed According to Final Documents_

VANOC followed through with the plans to construct the Whistler Nordic Centre, to host the Biathlon, Cross Country, Ski Jumping, and Nordic Combined events, as the Bid Book outlined. The facility was built on land owned by the Government of British Columbia; the WSL obtained ownership of the Whistler Nordic Centre for the purpose of operating the venue as a public partnership Nordic Centre at its completion prior to the Games, and retained ownership post-Games. The cost of completion for this facility was $119.7 million jointly funded by the governments of Canada and BC.

The venues capacity was 24,000 for the Olympic Games, with 8,000 spectators at each stadium. Environmental assessments were conducted for the competition venue as well as the legacy trails constructed for recreation use. The land chosen to be built on was previously a harvested forest, adjacent to a former mine, on-site wood waste was reused as landscaping materials in the construction process. The footprint of the venue was reduced by 30 percent to minimize the environmental effects to the area; including
avoiding the disruption of wetlands, and old growth forestry, and a reduction of need to
build stream crossings (Bid Report, 40).

This project, through the Shared Legacies Agreement, produced economic
opportunities for members of the Squamish and Lil’wat Nations, by awarding contracts
for trail development and building construction. Local First Nations’ land-use and
cultural considerations were incorporated into the legacy trial network design, which in
itself consist of approximately 50km’s of cross-country ski trails which attract
recreational and high performance athletes to the area. Aboriginal art was incorporated in
the venue, as part of the Vancouver 2010 Venues’ Aboriginal Art Program (Sustainability
Report, 115).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The facility, in itself is a legacy to the community through sport opportunities it
has provided locals, athletes, and tourists; it also acts as a catalyst and a platform for
other legacies to be presented on or achieved through.

The environmental legacy initiatives incorporated into the design, planning, and
construction phase of the Whistler Olympic Centre are examples of urban planning and
renewal. The decisions made in regards to this venue benefit the environment and in turn
the community long-term. Based on the definition of urban planning in this research
project and the legacies implemented into this facility, this venue is aligned with the
positive outcomes for the community of Whistler and British Columbia. The site
selection for this venue is another example of environmental legacy as it utilized already
disturbed lands, minimizing the impact on the environment, giving purpose and use to the
property which has benefited the economic well-being of the community through
tourism, and future hosting opportunities. Ken Melamed, an RMOW counselor explains the importance he believes the Whistler Olympic Park has in the community from a tourism perspective:

“In the competitive world of tourism, if you don’t reinvest and reinvigorate and add options for people, your visitors see you as being stale and stagnant. One of the fears that everybody had at the time was what do you do after the Olympics? Here we are, five years later, and we’re coasting on some degree with what the Olympics provided us. The next question is what does Whistler do to stay on the cutting edge? There is a culture of innovation and planning that’s still very strong. (Noel 2015)”

*Whistler Sliding Centre*

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the Whistler Sliding Centre was intended to be host to Bobsleigh, Skeleton, and Luge events during the 2010 Olympic Games. The facility was a permanent and newly constructed venue for the Games. The owner prior to hosting the Games was the Government of British Columbia, with the WSL obtaining ownership post-Games. The intent was that the WSL would operate the facility as a public partnership sliding centre (Bid Book V2, 39-61).

The proposed site for the Sliding Centre was at the base of Blackcomb Mountain. The project included land preparation, and grading, road preparation and parking lot improvements. The tasks at hand had been incorporated and fit into the Whistler Blackcomb Master Plan, in order to promote fore thinking and functionality. The
intended legacies of this facility were sport development through training opportunities for athletes; and economic and promotional gains through the future hosting opportunities and therefore marketing opportunities that come from hosting (Bid Book V2, 35).

This facility was subject to benefit from the Endowment Fund created by the Governments of Canada and British Columbia, to cover maintenance and management costs related to the facility to ensure the condition of the venue remain high for usage.

VANOC Completed According to Final Documents

VANOC followed through with the plans to construct the Whistler Sliding Centre, to host Bobsleigh, Skeleton, and Luge events, as the Bid Book outlined. Built at a cost of $104.9 million, the Centre opened in December, 2007. The owner of the facility is the Government of British Columbia through the completion of the 2010 Winter Games period, at which point the WSL took ownership for the purpose of operating the venue as a public partnership Nordic centre.

The facility was designed with sustainability in mind, in an effort to minimize the environmental development, for environmental and economic reasons. The planning logic behind the site selection was to minimize the environmental change of land-use, and reap the benefits of the ready-made tourism industry in Whistler. Energy efficient design factors were instituted utilizing an ammonia refrigeration system and capturing the waste heat to reuse, implementing a track shading and weather protection system, and exploiting tree growth to cast shade on the white painted track to reduce heat absorption (Bid Report, 35).

Aboriginal art was added to the venue as part of the Vancouver 2010 Venues’ Aboriginal Art Program. The Squamish and Lil’wat Nations were heavily involved in the
environmental impact assessment and have had continued participation in the decision making process post-Games as they are represented in the WSL2010 (Sustainability Report, 116).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The Whistler Sliding Centre, according to Keith Bennett, CEO of WSL has provided sport opportunities for athletes of all levels to participate and train in their respective sport.

“People in the (sliding sports) tell me this track is a game-changer for Canadian athletes. The opportunity to train here and call this one of their home tracks really positions them well to compete on the world circuit and gives them the opportunity to have some home field advantage, which is something the Europeans have always enjoyed. (Kingston 2010)”

Moreover, this venue has been a platform for further legacies to succeed. Urban renewal can be achieved through utilizing already developed land, not to take away from undisturbed natural land. Through urban planning, using this previously developed site also increases the success rate of future economic legacies. Keith Bennett goes on to explain the economical struggles of the Sliding Centre thus far. It is normal post-Games for venues such as this to lose money due to the costs associated with maintenance, however with the help of the Games Operating Trust, the Sliding Centre was expected to become more sustainable as the decade continues:

“So that’s what the Games Operating Trust was set up to do. That provides a certain level of funding to the venue and then we hope to make up the balance of what we need through these other things, whether it’s sport,
public rides, non-traditional things. But it will take some time to go from zero to a steady state.”

With the venue being located in Whistler, this venue would benefit from the pre-established tourism industry, and the specific demographic of individuals with an interest in the niche market of winter sports. Re-using the natural materials cleared during site preparation ensures a consistency throughout the venue, looking as natural as it was prior to development.

**Secondary Hard Infrastructure Projects**

In this section, projects deemed secondary hard infrastructure are introduced and discussed in the same format as above (see Appendix 3). The projects are listed according to their name from the Games period. Each project is then discussed including the intent of the Bid Corporation, followed by the actions of VANOC, and concluded with the impact on the community relative to Urban Planning, Urban Renewal, and Legacies.

**International Broadcast Centre**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the International Broadcast Centre (IBC) was to be located in the Richmond Trade and Exhibition Centre (RTEC), which was a newly constructed and permanent structure finished in time for the Olympic Games. The land the facility was built on is located neighbouring the Vancouver International Airport owned by the Government of Canada, however pre- and post- Games ownership of the facility was the city of Richmond. Post- Games use was much needed community development, through tourism leading to economic success (Bid Book V3, 117).
This area already had a network of transportation developed to easily reach downtown Vancouver, and the RTEC enabled economic, educational, and recreational purposes to the area as a legacy to the community of Richmond. The goal of the RTEC was to be the centrepiece of downtown Richmond striving to incorporate new recreational facilities, a high tech business park, expanded educational institutions, greenway links, public-private partnerships, and increased tourism (Bid Book V3, 119).

VANOC Completed According to Final Documents

VANOC chose to utilize the Vancouver Convention and Exhibition Centre as the IBC for the 2010 Winter Games, this was also the site for the Main Media Centre (MMC) in an attempt to keep all press and broadcasters in a common location. The switch occurred following the release of a 2003 Olympic Games Study Commission report recommending the move, regarding uncertainty surrounding the RTEC. Unlike the proposed RTEC, the Vancouver Convention and Exhibition Centre was an existing facility only in need of renovations. Owned and operated by BC Pavilion Corporation, the facility is located on Vancouver’s downtown waterfront and is used for community development purposes; the facility remained under this ownership being utilized for this purpose post-Games.

A renovation to the Vancouver Convention and Exhibition Centre was completed in April 2009. Although the renovations were not completed solely for the purpose of hosting the 2010 Winter Games, the renovations did allow the facility to have a role as the IBC. The renovations to the VCEC achieved LEED Platinum building standards in addition to triple the space of the original convention centre, a living green roof containing two-dozen coastal grasses, a seawater sourced water treatment system to
irrigate the living roof, and the restoration of the marine habitat of the oceanfront the facility borders on it shore (Bid Report, 50; Sustainability Report, 120).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The VCEC in its efforts to prepare to be the International Broadcast Centre for the 2010 Winter Games, was closed off and unavailable for public use from 6 January 2010 until 13 April 2010 (Vancouver Convention Centre 2010); this timeframe symbolized displacement for locals and typical users of the facility. Although the Vancouver Convention Centre may have hoped for increased economic presence as a result of being tied to the Olympic Games, according to Johan Fourie and Maria Santana Gallego, it is unlikely that the area has benefited from increased tourism, due to the smaller nature of the Winter Olympics versus the Summer Games or FIFA World Cup (Fourie and Santana-Gallego 2011).

The VCEC was to be expanded prior to any plans of usage for the Winter Games; the renovations only enabled the facility to hold this role during the Games. However, the 2010 Bid Corporation signed an agreement with the VCEC requiring specific square footage in the facility. Upon this agreement, the election of a new government, and the winning of the Olympic bid the expansion was agreed to after being turned down in 1999 as a result of the denial to contribute federal tax dollars to cover capital costs (Smith 2005).

The VCEC, began construction in 2002 and the project was completed in 2005; however, the first year of normalized operations was deemed 2009 with an expected loss of $100,000-$900,000 per year between (Levitt 2001). The expansion was deemed necessary by supporters within the community that deem convention centres to be a
catalyst of economic revenue in the community. However, due to the hosting responsibilities, the VCEC renovations doubled in cost, and due to the economic downturn which began prior to the Olympics, convention sizes shrunk, and the need for that large of a space shrunk, resulting in larger deficits for the convention business (CBC News 2009). The size may not have been needed for anything other than the Olympic Games, and with cities such as New York, New Orleans, Chicago, and Atlanta recording losses in the convention hosting industry (Smith 2005), it is still too early to tell if the VCEC will pay off for the city of Vancouver, province of BC, and Federal Government of Canada and all levels of taxpayers.

Environmentally, the VCEC is amongst the most sustainable buildings in the world. The incorporation of features including natural marine life in the buildings foundation along the water to improve the marine habitat in the harbour; the roof composed of natural grasses to house birds and a rain water collection system to water the roof; and the inclusion of windows to incorporate more natural lighting, all lead to the use of less energy and resources. In addition to less waste, the features add to the aesthetics of the building, making it one of the most recognizable pieces of infrastructure in the Vancouver skyline. These sustainable features are what allowed the facility to be granted LEED Platinum, and the premier sustainable infrastructure in Vancouver, a city that is internationally renowned as a ‘green city’ on their way to the ‘Greenest City 2020’ (City of Vancouver n.d. (2)).
Main Press Centre

Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, the Main Press Centre (MPC) was to be housed within the Vancouver Convention and Exhibition Centre (VCEC). Located on Vancouver’s central waterfront and arguably Vancouver’s’ most recognizable landmark, the site owned and operated by BC Pavilion Corporation was selected because of its central location to hotels, venues, and sheer size. The facility required renovations for its purpose of hosting the MPC, which were already underway at the time of the Bid submission; the revitalization efforts included the expansion of the VCEC and was coordinated by the federal and provincial governments (Bid Book V3, 119). Post-Games the centre remained under the ownership of BC Pavilion Corporation as a community development facility.

VANOC Completed According to Final Documents

As a result of VANOC assigning the IBC to the Vancouver Convention and Exhibition Centre, the new site of the MPC was Canada Place, serving as the workspace for accredited members of the written and photographic press. The existing facility, owned and operated by Canada Place Corporation, was used for community development purposes and continues to serve this purpose in the post-Games period. The facility had undergone a renovation earlier in the decade in what was the original Vancouver Convention Centre facility (VANOC Knowledge Report 2010, 21).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

Canada Place was built in 1986 to serve as the Canada Pavilion at the ’86 World Expo. Upon completion of the expo, the pavilion was converted to be the VCEC, which
is now the VCEC East Building, as the newly constructed VCEC is considered the West Building. The East Building still located in Canada Place was host to the Main Press Centre during the 2010 Winter Olympic Games. The iconic white sails of Canada Place are the most iconic feature to the Vancouver skyline since they were constructed and is a hub for economic gains being home to a cruise pier and 5-star hotel (Priebe n.d.; Canada Place n.d.). In its efforts to prepare to be the Main Press Centre for the 2010 Winter Games, the VCEC East Building in Canada Place was closed off and unavailable for public use from 6 January 2010 until 19 March 2010 (Vancouver Convention Centre 2010). Similar to the IBC, the economic impacts of the closure of these facilities was detrimental to the economic well-being of the community. The Canada Place, also being home to the Port of Vancouver and the Pan-Pacific Hotel, remained a busy centre leading up to the Games, however, it is difficult to justify whether the facility as home of the main press centre affected the other businesses, positively or negatively.

Throughout the Games period, however, the MPC along with the IBC played an integral part in the distribution of coverage relative to the sports events that occurred during the Games (IOC 2010). The close proximity of these two pieces of infrastructure allowed these closely related fields to generate conversely and efficiently. In addition, the Jack Pool Plaza being located within the same area, made this downtown section of Vancouver a bustling area where fans took to the streets to celebrate the Olympics. Canada Place has remained a flagship facility in the core of Vancouver, and continues to draw economic success to the region with its tenants being solidified in their roles in what they provide to the community from tourist attraction.
BC Place

Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, BC Place was to be the site of the opening, closing, and nightly medal ceremonies. The already existing facility located on the downtown Vancouver waterfront, owned and operated by BC Pavilion Corporation, was a commercial stadium home to the BC Lions of the Canadian Football League (CFL) and Vancouver Whitecaps of Major League Soccer (MLS) which required permanent improvements to the audio systems to hold the ceremonies related to the Games (Bid Book V3, 129). These improvements remained part of the infrastructure after the Games, as the stadium continues to be utilized for commercial use, under the operation of BC Pavilion Corporation.

VANOC Completed According to Final Documents

VANOC utilized BC Place as the site for the opening, closing, and medal ceremonies for the 2010 Winter Games. The facility underwent the designated renovations and remains under the ownership of BC Pavilion Corporation for use as a commercial stadium in its post-Games life. The VANOC Bid Report and Sustainability Report define the ceremonies site as needing ‘limited modifications to an existing facility’ (Sustainability Report, 120); the upgrades, however, differed from the minimally addressed audio enhancements mentioned in the bid book including replacing the roof liner, and improving the accessibility of entry points, concessions, and washrooms (Bid Report, 52; Sustainability Report, 120).
How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The greatest result of utilizing BC Place as the location of the opening, closing, and medal ceremonies for the Games, was that the facility already existed and for the most part existed with the required capacity to be effective. The minimal renovations needed to the facility are what made this decision a ‘smart site selection’ as deemed by VANOC. The facility itself was accustomed to staging large crowds regularly as host to two professional sport teams, having previously hosted the opening ceremonies for Expo ’86, and often the location of other big entertainment events within Vancouver (BC Place n.d.).

As discussed in Jim Morris’ 2011, article ‘Modern Technology Abound at New BC Place’ aside from an unforeseen repair to the roof, caused by a tear due to snow fall the minimal upgrades required, were to promote better accessibility to the stadium, concourse, and washrooms. Howard Crosley, BC Place General Manager discusses the effect the upgrades contributed to the enhanced accessibility and experience for all visitors and in turn how these renovations helped achieve urban renewal in the community by helping aid Vancouver’s efforts to become a Green and accessible city:

“Right now there is only wheelchair access on level three. A lot of work is being done in terms of accessibility for people in wheel chairs, so they can have access to all levels in the stadium. Once we do that all the services have to be improved as well, such as the washrooms and lower counters at the concession.”

Since the completion of the Games, BC Place has undergone larger renovations in an attempt to align the facility with the best in the world, while making it more
sustainable, with higher usage rates. This phase of construction was agreed to prior to the Games, however not completed until after the Games period had past. The inflatable dome roof was replaced by a retractable ceiling, windows were incorporated into the structure to allow more natural light, and revolving doors replace old entrance ways; and technological advancements including better Wi-Fi coverage, new seats, modern turf field, and enhanced concession and washroom facilities (Morris 2011). The roof, lighting, and revolving doors all figure to lower the hydro usage and rates drastically as a result of minimizing the need for constant air flow to keep the roof erect.

The costs associated with doing two similar construction phases, was counterintuitive. It seems as though BC Place did not want to be subject to criticism from the community as a result from taking tax dollars to improve a private venue, and delayed the second phase of construction to deflect the criticism. If the upgrades are necessary, which they were when the roof tore, and the funding was going to be provided as a result of the Olympics, it would have been more efficient to do the construction all at once. The new roof and technological improvements, allow the stadium to extend its lifecycle an additional 30 years, and attract 40 additional nights of usage to an arena in the city core that will nearly double the economic impact it brings to the community (Morris 2011). Brian Hutchinson goes into detail about the upgrades to BC Place and the following quote encapsulates his thoughts on the changes, and what they provide in comparison to the features they replaced in the ‘old BC Place’:

“The original BC Place … It was horrible, being trapped under the puffy top, especially on a nice summer’s day. The acoustics were dreadful, whatever the season or event…The stadium interior is now bright and airy.
A 10-metre tall transparent facade runs the circumference just below the lower roofline, allowing natural light to flow inside and offering city and mountain views to spectators. Embedded in the facade material are metal dots called frits; these reflect multi-coloured LED displays that will dance across the roof’s exterior at night. (Think Beijing’s Bird’s Nest stadium.) Below the facade are giant louvers that can be adjusted to circulate fresh air. (Hutchinson 2011)”

In a CFL forum post by drummer_god about BC Place, multiple quotes are published addressing the costs associated to the refurbishment of BC Place. Some question why the decision to build a new stadium isn’t being explored, or why the roof wasn't replaced when economic times were more suitable and in favour of these major construction projects:

“Had they acted on that report in 2006 we would have this roof replaced before the Olympics and we would have this roof much cheaper. (Harry Bains, Provincial NDP Olympic critic)”

“There have been calls for a new, open-air stadium but it’s estimated building a new facility would cost around $1.2 billion. That price doesn’t include the needed infrastructure, roads and services.”

“It’s not sustainable to knock a facility down and start rebuilding it again. We need to be sure it fits into the city’s fabric. (Gordon Campbell, BC Premier)”
Through the public perception and media input, it is clear that everyone was of similar belief that BC Place was outdated and becoming the negative view in Vancouver’s skyline. However, the differences in opinion arose with the planning, decision making, and fulfillment practices carried out during the design and construction phases of this facility.

**Olympic Village Vancouver**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the Olympic Village Vancouver was newly constructed to provide accommodations for athletes and other IOC family. The village was planned to remain permanent post-Games as property of the city of Vancouver providing market and non-market housing to the citizens of Vancouver, the non-market housing sector occupies 20 percent of the residential listings; there are temporary facilities that were removed post-Games including dining halls and other support facilities. The cost of construction was estimated at $107.9 million and was constructed by Vancouver regardless of need for the 2010 Winter Games (Bid Book V1, 61; Bid Book V2, 193).

The proposed site for construction was on the oceanfront along the south shore of False Creek; the last undeveloped land on Vancouver’s oceanfront, encompassing former industrial land. In 1991, the city of Vancouver approved the land to be categorized as residential, in order to fill a need of bringing housing closer to jobs in downtown Vancouver. In addition to accommodation, the village provides daily services and amenities to its residents during the Games period, which post-Games provide parks, waterfront trails, offices, and shops to residents in addition to housing (Bid Book V2, 193).
VANOC Completed According to Final Documents

VANOC constructed the Olympic Village Vancouver as stated in the Bid Book as accommodations for athletes and IOC family. The City of Vancouver has retained ownership of the facilities and provided market and non-market housing to its residents. At completion, the Olympic Village was constructed to contain 1,100 units including 250 affordable housing units and 100 rental units; the overall number of units was approximately double the anticipated number in the Bid Book, yet the number of affordable housing and rental units remained the same. Furthermore, legacies include a community benefits agreement between the City of Vancouver and the Business Opportunities with Business Inner-City Society to guarantee jobs, and finances allocated to training and procurement funds for inner-city residents and businesses (Sustainability Report, 119).

The design for the Vancouver Olympic Village won the Federation of Canadian Municipalities Award for Sustainable Transportation in 2006 for the design and effort placed on creating a hierarchy of transportation, to limit the use of vehicles in general but specific focus on extinguishing the use of single person use of personal automobiles. Buildings have electric vehicle hook ups and car share vehicles (Bid Report, 46). Further efforts advocating for environmental sustainability in the design process were targeting LEED Platinum certification for green buildings and achieved LEED Gold (Sustainability Report, 119), making it the highest rated environmentally designed building in Canada. The selection of this location, resulted in fixing property that needed urbanization and renewal including reintroducing indigenous vegetation and marine habitat rehabilitation, restoring the shoreline and contaminated land from previous industrial usage in an
attempt to limit or eliminate the contamination of the aquatic environment. The installation of a green roof, Net-zero energy building initiatives and water efficiency programs was implemented to minimize the strain on the municipal systems (Bid Report, 47).

*How Does this Impact Urban Planning, Urban Renewal, and Legacy?*

The Olympic Village in the planning process had potential to be one of the most prolific pieces of infrastructure built to serve a need for the 2010 Winter Olympics, with the most potential to provide a positive legacy to Vancouver after the Games. Renewing a piece of land that had occupied prime real-estate on Vancouver’s waterfront from industrial abandonment to vibrant, environmentally sustainable, affordable income housing. Gregor Robertson, the Mayor of Vancouver, stressed the value of the Olympic Village and the accomplishment it truly is in the quote below; environmentally, the village, now known as ‘Millennium Water’ (Recollective Consulting n.d.) is a marvel, credited as the world’s ‘greenest neighbourhood’, the structural accomplishments are something to be proud of:

“This should be a source of pride for residents and an example to the rest of the world. [This] is a big feather in our cap, as we move towards our goal of becoming the greenest city in the world by 2020. (CTVbc 2010) “

Vancouver has set a precedent with attainable environmentally sustainable building and although the cost to build green buildings is high, $1 billion in the case of the Olympic Village Vancouver, Roger Bayley, SEFC design manager, believes the need for sustainability from green building will be more drastic and evident in places around the globe prior to the need domestically:
“Everybody is trying to increase the capacity of the building industry here. Is there a sense of urgency in the marketplace? Not yet. The experience gathered here in Vancouver can influence the situation in the world very broadly. What we've done here in terms of green building is a drop in the bucket compared to Asia, where they recreate our population every 20 years. (Recollective Consulting n.d.)”

The downfalls of the Vancouver Village come from mismanagement of the project, and the tumultuous economic stressors that have ensued. According to Penny Ballem, the city of Vancouver City Manager, the first issue was the rapidness the project was facilitated with to meet the deadlines associated with the 2010 Winter Games:

“Is that the normal way we do business? No,” adding that the Village would have been built over 20 years anywhere else in the city (Howell 2014)

Economically, the Olympic Village Vancouver had provided difficulties for the city of Vancouver. Mayor Gregor Robertson addressed a difficult partnership with Millennium, the corporation tasked as the developer of the village, which defaulted and failed to pay the full $200 million agreed to the city of Vancouver:

“The bid that was accepted was way higher than the other bids that came in so if you look at where the market went, it was unrealistic at that level and the city was never going to recover all that $200 million that was pledged. (Lee 2014)”

Moreover, the city became responsible for a $750 million loan for the construction costs. The city of Vancouver then hired and tasked the receiver firm Ernst
and Young with the duties of increasing revenues as much as possible. The marketing
campaign issued by this firm had been generally successful in selling off real-estate,
however their services came at a cost of $5 million to the city of Vancouver (Cooper
2013). Through the sales of the condominiums, the City of Vancouver was able to garner
enough funds to pay off the loan they were forced to take out, and contribute some
additional infrastructure to the neighbourhood in the form of roads, parks, and
community services. Additionally, the final 67 real-estate units were sold to the Aquilini
Group, the owner of the Vancouver Canucks (Howell 2014; Lee 2014).

Soci
ally, the Olympic village was intended to serve as social or low-income
housing. However, post-Olympics the decision was made by city council in an effort to
minimize the costs of construction, the number of social housing units available would
shrink and more units would be available at market prices. This decision was met with
negative reviews from social activists in Vancouver. Below are quotes from a CBC News
article in 2010 ‘Vancouver cuts Olympic Village social housing’ including a quote from
Mayor Gregor Robertson attempting to justify the decision; and a quote from Laura
Stannard, activist with the Citywide Housing Coalition, displaying resentment toward the
decision because it diminished the legacy VANOC and the city of Vancouver promised
heading into the Games:

“This is the best option for the Olympic Village, given the financial
difficulties we inherited. (Mayor Gregor Robertson)”

“The promise that was made by VANOC, and in fact even before
Vancouver got the bid [for the 2010 Games], the promises that were made
if we got the Olympics were for thousands of units of social housing. And then it came down to 250 and now it's down to 125. (Laura Stannard,)

As seen in the 2010 news article ‘Olympic Village social housing units still empty’ by CBC News, activists in Vancouver were displeased with the lack of initiative being taken by the City of Vancouver. In particular, Am Johal, president of the Impact on Community Coalition, was displeased the City of Vancouver had failed to address the social housing situation and nominating a non-profit organization to manage this housing situation in the village:

“When budget overruns were happening, it's not the speed skating oval or the billion dollars in security where funding in the budget came out of it was the social housing. These are the pieces that are being viewed as an afterthought, and the process to actually fill up these spaces continues to reinforce that. In some degree, this kind of undermines the belief that many of us had in civil society organizations. The social housing was very much an afterthought.”

Finally, when offers were acknowledged by the City of Vancouver, Michael Geller, a former NPA council candidate, voiced his concern and the reality of the situation; that people were starting to be made aware that more losses were likely to come from social housing as well:

“It’s not worth $110 million. In fact, the city cannot find any non-profit willing to take over the social housing portion at anywhere near the price it paid. This, too, is a loss that will never be recovered. (Howell 2014)”

As time had progressed since hosting, and the woes regarding the financial burden
have defused, the neighbourhood has become heavily regarded as an up and coming community within Vancouver. The rapid growth in the community has guided more residents to the neighbourhood. However, Brent Toderian, a former chief planner for the city of Vancouver, stated that although residents who committed to the neighbourhood quickly had not seen the same payoffs as those more recently due to buyers wanting to rid themselves of risk and costs the neighbourhood is still well regarded and appreciated by those who have settled there (Gold 2015):

“I’m very comfortable saying the Village is a success from a planning and urban design and sustainability perspective — that’s different from saying that people didn’t overpay”

To further the statement of appreciation Todarian made towards the neighbourhood, John Coupar, NPA parks board committee member and resident of the Village, subjected the neighbourhood to praise despite his early investment in a 2013 Sam Cooper news article titled ‘City of Vancouver taxpayers facing upwards of $300-million loss on Olympic Village’:

“When we first moved down here it was pretty quiet and it was a bit of a leap of faith that it would work out. I’m not that familiar with the financial ins and outs, but from a residents’ point of view I think the place will come alive, and over time it will be seen as a real positive thing for the city.”

The Olympic Village Vancouver made an impact; the outcomes are coming to fruition, regarding the urban renewal and legacy initiatives to the community. However, the failures were drastic regarding the planning process and the lack of due diligence
carried out by the City of Vancouver and VANOC to minimize the risks financially and
socially to the community and taxpayers. The minimal planning and inability to ensure
original developers and financers were accountable and committed throughout the entire
process to carry out their obligations, resulted in the community being the one to suffer
for the gap of years between the end of the Olympics and the rejuvenation of the
neighbourhood. The previous municipal governments regime agreed to terms which
resulted in the next mayor and staff to resolve to the best of their abilities, however the
direction they went to find solutions were not aligned with the promises of the previous
regime.

Second Olympic Cauldron

Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book

In the Bid Book, there was no mention of a Second Olympic Cauldron. There
were discussions of locations with high marketability for the IOC and VANOC to
highlight licensed logos of the Olympic movement, however, the main infrastructure
mentioned was the installation of the Olympic Rings. The highlighted locations for the
Rings in Whistler included peaks of mountains sitting atop the village, and at the base of
the ski jump, as has become typical in other Winter Games (Bid Book V1, 91).

In Vancouver, sites for the Olympic Rings included Grouse Mountain which rises
behind Vancouver, comparable to Ring sites in Lillehammer and Salt Lake City; or along
the Lions Gate Bridge, similarly to Ring sites in Sydney (Bid Book V1, 91). Overall the
message portrayed by the Bid Book, is there are numerous sites to present icons of the
Olympic movement in the aesthetically beautiful region of BC.
VANOC Completed According to Final Documents

VANOC chose to utilize a secondary Olympic Cauldron in Jack Poole Plaza on Vancouver’s waterfront, one to be seen by everyone, since the primary cauldron was located inside BC Place. The cauldron’s purpose is to symbolize the Games are in effect and taking place. The lasting legacy was to represent what was; providing a symbolic understanding of what the community accomplished by winning the Bid and hosting the Olympic Games, as well as remembering the late Jack Poole, VANOC chairman, and his efforts to bring the Olympics to Vancouver (Knowledge Report, 17). The Cauldron remains permanent under the ownership of the City of Vancouver, and serves as an educational and commemorative figure of the Games.

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

In a statement published by Charlie Smith in his 2010 article ‘Olympic flame will remain on Vancouver waterfront long after the Games are over’, Gord Campbell acknowledged the Olympic Cauldron’s location within Jack Poole Plaza as a nice legacy in itself to an individual who held a role so important to bringing the Games to Vancouver:

“This is particularly special because now one of the most photographed and visible icons of the Games will be forever located here in Jack Poole Plaza. This place is named in honour of a great friend and visionary who was instrumental in bringing the Olympic Spirit to our province and back to Canada for a third time.”

With the location being adjacent to the Canada Place and the VCEC, a constant flow of tourism through the plaza is likely to continue as well as increased traffic from
locals and employees of businesses in the area. In the same article, Mayor Gregor Robertson made the intent and plans for the plaza clear, as the city planned the plaza will act as a park setting, with the Cauldron as its centerpiece:

“This cauldron and its flame will draw people not only during February and March 2010 but in the years to come as a potent symbol of our time in the limelight as the successful host of the world's best winter athletes.”

As a legacy to the Games, it is truly one of the only existing memories of the Games being there, yes the infrastructure is all still there, however after the renovations and conversions into legacy mode, the only true reminder of the Games is the Cauldron. Despite being one of the last sole pieces of remembrances in its original form some think it’s not adequate enough, Jessica Nichols, a resident of Toronto and avid Olympic fan, seems the cauldron is underwhelming:

“It was smaller than we expected. It looks so big on television. It looked so big at the time. (Keller 2014)”

A major focal point of this Olympic Games was to ensure accessibility to all individuals, and the Olympic Cauldron although now open to the public to admire was once not so accessible. During the Olympic festivities a chain link fence was constructed around the cauldron making it difficult to fully observe and enjoy the legacy. Mike Styles’ 2010 article ‘outrage builds as Vancouver Olympic Cauldron is closed to the public’ captured the frustration of Pat Chambers, a North Vancouver resident, and another from an anonymous tourist, just two of many visitors to be disappointed with the inability to admire and observe the cauldron, not to mention the unpleasant aesthetics of the area:
“It’s really a bit of a letdown. We’ve lived through the buildup of these Games or the past seven years and you would think that the public could get up close to take pictures and see the flame. (Pat Chambers)”

“It looks like the flame is in jail. It’s kind of hilarious to see after coming all this way. (Anonymous tourist)”

The Second Olympic Cauldron had the fencing removed prior to Canada Day 2010, when the flame was re-lit. In an effort to make the Cauldron permanent, BC Place, the corporation in control of the Cauldron post-Games, constructed a reflecting pool for visual appearance and as an extra means of security to distance people from the Cauldrons’ structural pillars in a less intrusive form than the chain link fence originally constructed (Grout McTavish Architects n.d.). Unfortunately, the city of Vancouver missed an opportunity to rekindle the social unity by having a gathering and creating a festive atmosphere. The cauldron was lit rather uneventfully. Also with the fences being deconstructed, a camera was installed to observe the visitors, as a security apparatus and precaution (Mackin 2010). The cauldron is typically re-lit for special events such as Canada Day, however for a significant contribution of $5000 the cauldron can be re-lit for a four-hour period (Mitanis 2017).

Overall, the Second Olympic Cauldron was constructed to provide an accessible symbol, representing the presence of the Olympic family in Vancouver, that the Games are in progress, and the achievements and hard work made by many individuals within the community to get the Olympics in Vancouver. However, originally this legacy was not accessible and actually an eyesore with the security precautions put in place. Post-
Olympics and in its transition into legacy mode, the city of Vancouver, and PavCo missed an opportunity to enhance social inclusion and civic pride with the re-lighting of the Cauldron; they chose to not have a ceremony or gathering, which would have brought the community closer together and remember the achievements associated with the Olympic Games two-week festival. The Jack Poole Plaza is better equipped now to be a centrepiece for gatherings in Vancouver, albeit not necessarily considered a need for rejuvenation, the plaza will not attract more traffic. The scenic backdrop of the bustling Canada Place, Vancouver Pier with its cruise ships, and the mountain backdrop provide a scenic picture with the Olympic Cauldron for tourists and residents alike to visit.

**Whistler Media Centre**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, there were no intentions to have a media or broadcast centre in Whistler; instead there would be temporary satellite media centres located at each of the venues.

*VANOC Completed According to Final Documents*

Instead of utilizing temporary satellite facilities, VANOC opted to host the Whistler Media Centre (WMC) at the Whistler Convention Centre. The Whistler Convention Centre was an existing facility, owned and operated by Coast Mountain Reservations serving community development needs. The WMC’s primary function was to provide broadcasters a base to work from in Whistler and provide additional services to written and photographic press (Knowledge Report, 22).
How Does this Impact Urban Planning, Urban Renewal, and Legacy?

After Vancouver won the bid to host the 2010 Winter Olympic Games, TELUS signed a naming rights agreement with the Whistler Convention Centre. Karen Dosing, a TELUS spokesperson, attempted to clarify TELUS’ intentions of investing in the region being an effort to bring higher than average business to the convention centre, and sponsoring additional sporting events in Whistler:

“This is really part of TELUS’s commitment to supporting the communities where we operate. We are very proud to be the title sponsor of the newly renovated TELUS Conference Centre at Whistler. (Ogilvie 2003(1))”

The renovations themselves began in Fall 2002, and were facilitated due to a decrease in group business across the RMOW. The upgrades including available space and technological improvements have attracted larger conferences from sought after corporations and organizations (Ogilvie 2003(2)). Barrett Fischer, interim president of Tourism Whistler, believed the advanced conference centre was integral to having the capacity to attract the Olympic Games to Whistler (Ogilvie 2003(1)), and that this association with the Olympics would attract further conference related business to Whistler:

“When we do look at other Olympic destinations, in fact, targeting the meetings and incentive markets has been where they have seen their greatest success. Large groups want to be affiliated with the Olympic name and want to have the opportunity to meet in the facility pre-Olympic and post-Olympic. It gives some added excitement, exposure and profile
to their event. And I think there is a real belief that… if we have the capabilities to pull off such a large scale event then we absolutely have the capability of showcasing important corporate and association meeting planners and their event throughout North America. (Ogilvie 2003(2))”

Most recently, post Games, the Conference Centre has undergone another renovation to the Rainbow Theatre, which was not included in the renovations of 2002/2003; the RMOW agreed to fund the project as the conference centre was deemed integral to the community. For perspective, in 2013, the conference centre equated to 249 usage days, 22 percent of nightly stays in summer months and 11 percent of nightly stays in winter months; Tourism Whistler convention sales group generates 81,000 room nights per year with groups associated with usage at the Whistler Conference Centre being 45,000-55,000 annually. In a Tourism Whistler media release ‘Tourism Whistler unveils refurbished Rainbow Theatre’ Nancy Wilhelm-Morden, the Mayor of Whistler addressed the impact the refurbished theatre would have on the RMOW:

“Conference and event business is core to the current and future success of the Whistler economy. The Whistler Economic Partnership Initiative Committee identified the expansion of conference business as one of its key strategies, and investment in the Rainbow Theatre renovation is one of the early actions to help move this forward.”

There were no renovations which took place due to the Games occurring directly. The renovations were completed prior to the Bid being won by the Bid Corporation; although it is possible the renovations were completed to ensure usage of the WCC if the bid to host the Games was successful, it would be naïve to insinuate that. The legacy of
this facility was economic and tourism based, according to quotes from individuals within Whistler, many believed the connections between the RMOW and its state-of-the-art facilities to the Olympics, would draw tourists and business to the area. Further renovations might have been necessary to accommodate future business; it is too early to estimate and beyond the scope of this study, however the WCC was successful in bringing tourists to the RMOW and should continue to be.

**Whistler Medals Plaza**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the medal award ceremonies for events in the Whistler area were to take part in a celebration site set in the centre of the village. The philosophy behind the celebration sites was to unite the town and spectators with the athletes. Closing the RMOW village to car traffic and utilizing foot traffic for a temporary period during the Games. It was intended to feature interactive programs between Vancouver and Whistler for the medal ceremonies so athletes and spectators could share the celebrations from two communities (Bid Book V3, 129).

*VANOC Completed According to Final Documents*

VANOC followed the Bid Book and utilized a central celebration site, the Whistler Olympic Plaza, within the Whistler Village, to create a larger profile of the events taking place there, giving sense of “Canada’s Game’s” and inclusivity. The site was temporary and the traffic and use of the village returned to normal in the post-Games period. In 2008, during a time in the planning process that was tainted with budgetary concerns, it was recommended to have medal ceremonies at the event venue. However, to follow the commitment of Whistler, the IOC, and VANOC to provide the best experience
to everyone through the Winter Games, VANOC, the Government of Canada, and the
RMOW provided funding to ensure the medal ceremonies took place at the outdoor
amphitheatre Whistler Olympic Plaza, built solely for the nightly medal and Paralympic
Games Closing Ceremonies (Bid Report, 52; Knowledge Report, 19).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The Olympic Plaza during the Games symbolized a place for celebration and
interaction; it was the site of medal ceremonies and various forms of entertainment. It
was and still is the site of the Olympic Rings and the Paralympic Agitos that continues to
attract visitors for pictures. Today, the plaza incorporates an ice rink during the winter
and park space for entertainment. It is now the home to the original Olympic cauldron lit
to symbolize the Games, as well as aluminum panels to commemorate the athletes that
participated in the Games; and a memorial for Nodar Kumaritashvili, the Georgian luger
who died on the opening day of the Games (RMOW n.d.).

As a result of the financial troubles and budgeting burdens VANOC was
experiencing, the Whistler Medals Plaza was deemed less important than other venues,
and until Whistler and the more influential IOC commission voiced their stern
displeasure, VANOC intended to provide the medal ceremonies at the venues in Whistler
(Lee 2009). Leading to the on and off again debate, the RMOW was not always
supportive of the Medals Plaza. Ken Melamed, former Mayor of the RMOW, was quoted
in a 2014 Pique magazine news article, ‘Lasting Legacies’ by Damian Inwood, seeking
environmental discipline to preserve trees, others sought a multi-purpose sports facility;
however, in the opinion of the former Mayor of Whistler, the Plaza has provided a
centerpiece to the community and rounded out the needs of the village:
“It's proved successful beyond our expectations. The village was missing that kind of central gathering place, flexible enough to be a great hang-out space for families to picnic and sit on the lawn, then to be heavily programmed into sporting event venues or concerts, with an accessible playground and icons that celebrate the Games.”

Whistler politicians, leaders, and community members were making a conceded effort to increase the cultural events occurring in the community as well. John Rae, Whistler’s manager of strategic alliances, in the quote below argued the potential the Olympic Plaza provided Whistler; it is central to this mission as it provides the space to entertain and educate many people through its lawn, outdoor auditorium to host concerts and festivals, the Olympic rings, the Catrophe, and ice rink for skating in the winter:

“Culture doesn't necessarily mean ballet or opera. Whistler may not stage an opera – but we could have a criterium [a short cycling race]and a concert that follows it (Stueck 2011).”

The Olympic Games and the Games operating trust, set aside by the provincial and federal levels of government, provided the municipalities and organizations the resources to ensure success of legacies in the area and are providing the opportunity to adapt services and infrastructure to fulfill the needs of the community. Appropriately, the municipalities and their constituents had to address the potential impacts of the plans to adapt, which would be appropriately implementing CPT and social theory. In the following quotes by members of RMOW’s council and government from Christopher Poon’s 2011 newspaper article ‘Ice Skating coming to Whistler Olympic Plaza’; most of
the quotes are in support of the ice skating rink being placed at the Olympic Plaza, however, it is unknown if there are other opinions from people in different situations:

“What we've seen is a transformation of the space. We've had concerts, bike races, animation and car clubs. A lot of energy has been brought to the north of the Village that we haven't seen before. We'd like to extend things for the winter months and there remains an interest in ice skating from the visitors, an interest in family activities, and we'd like to continue what we already started by bringing the community and visitors together. (Jan Jansen, general manager of resort experience)”

“This is a great use of these funds, something that's been screamed about for the six years I've been involved and it's going to be great for business. It's about making business for people here that much better and this is going to expand the operation of business when it is there. Thanks for getting this done quickly (Chris Quinlan, councilor of RMOW).”

“This is part of legacy from the Olympic Games and why the Province gave us RMI funds - to produce a new product that is exciting to revitalize our Village. This will bring guests and locals into the Village and Whistler is at its best when the locals are there enjoying the same amenities as its guests (Ralph Forsyth, counselor of RMOW).”

“I will not be supporting this. The timing seems a little rushed. One of the things that disturbs me is that when I see it being free of charge, it doesn't work for me at this point. I would like to see how we can partner for success on this thing and have a program that works with sponsorship,
maybe ask the FEA (Festivals, Events and Animation Department) to see if there are demands for shows (Grant Lamont, counselor of RMOW).”

The quotes above are specifically related to the insertion of an ice rink during the winter months to the Olympic Plaza. The opposition was well regarded and represents the intention to collaboratively approach the decision and induce urban planning and renewal strategies through providing opportunity to organizations in the region, expanding their reach. The decision was originally made in 2011 to implement an ice rink pilot project; due to its success and how well it was received by the general public. The ice rink has become a normalcy now in the Plaza that the community awaits and welcomes joyfully.

In an expansion of culture, the Olympic Plaza provides a place not only for entertainment and gathering, but a place of remembrance and education. As a result of being the permanent home of the Olympic Rings and the Paralympic Agitos, the Olympic Plaza is aligned with an educational and informative area of the RMOWs’ involvement in the Olympic Games and the role it played in developing this legacy and other parts of the municipality. In addition, the Plaza is now home of the Whistler Cenotaph, a memorial to Canada’s fallen soldiers; in the quote below, Tom Thompson, a former teacher and counselor of the RMOW explains what moving the Cenotaph to the Olympic Plaza is trying to achieve:

“moving the cenotaph is about providing year-round education (Dupuis 2017).”

The move ensures the cenotaph is as highly regarded as the Olympics, and that neither overshadows the other. That Canada’s fallen receive the attention and praise they
deserve, while having the memorial placed in the centre of a desired location, with pedestrian traffic to enjoy the memorial.

The RMOW has clearly benefited from hosting the Games with the construction of the sporting facilities infrastructure that undoubtedly has become a legacy of the Games. However, the Whistler Olympic Plaza has become a centre piece to the community through urban planning and renewal strategies. The plaza draws individuals and groups of people constituting many ages, needs, and other demographics. It has provided a place for social gathering and education, while costing the RMOW minimal amounts, due to the financial support contributed by the provincial and federal governments, and VANOC due to the stern recommendations made by the IOC, to end the on-and-off debate of having a medals plaza to celebrate the medals ceremonies. This decision to construct a medals plaza has paid off for the RMOW. Although it is difficult to assess their intent of usage, despite the following quote from then mayor Ken Melamed, for the plaza when they professed their need of the infrastructure, the municipality and its leaders have made the most of their opportunities to continue to improve the Plaza to meet the needs and demands of its users.

“The celebration site that was built in Whistler was always intended to become a special place in the village, which in the past had been an unused site. That’s now been converted into the Olympic Plaza, and it’s become a fantastic place, not just to celebrate 2010, but also to bring Whistler into the present with a new cultural hub that provides a family and play area. (IOC 2014)”
Olympic Village Whistler

Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, the Olympic Village Whistler was to be a newly constructed facility to house the athlete and IOC family contingent, located at the entrance to the Callaghan Valley near the Whistler Nordic Centre. The post-Games owner was intended to be the RMOW for the purpose of accommodation for visiting athletes and non-market living for the residents of the RMOW (Bid Book V1, 61). Most of the village was to remain permanent including self-contained dwellings and apartments. Temporary infrastructure includes dining halls and support facilities which were funded by VANOC; and pre-manufactured buildings were moved post-Games to provide a legacy for First Nations, as well as non-market housing for residents of the RMOW.

To serve the needs of this village as the Olympic Village for the Paralympic Games, the facility was to be made fully accessible with 300 rooms, including 450 beds, being wheelchair accessible. Also included in this neighbourhood village were amenities such as daycare, shopping, and meeting space; recreational facilities, sports fields and community gardens, with pathways to the Nordic Centre and rest of Whistler; and its own recycling plant (Bid Book V2, 196).

VANOC Completed According to Final Documents

VANOC followed the plan in the Bid Book, constructing the Olympic Village Whistler to accommodate the athlete contingent and IOC family, and contains a High Performance Centre with conditioning gym, gymnastics hall, recovery and change rooms, a testing room, offices, and a multi-purpose meeting room (Bid Report, 48). Aboriginal
art was installed at the facility as part of the Vancouver 2010 Venues’ Aboriginal Art Program to recognize traditional and contemporary pieces of work from artists across Canada.

The village was developed adjacent to previously disturbed land, a municipal landfill, and integrated a wetland complex on-site for storm water retention, to have a Net-zero effect on the Cheakamus River which borders the property of the Whistler Olympic Village. The Village was built to be the focal point in a sustainable community as a pilot project for LEED building standards; with the development of a community and district energy system to utilize heat from the municipal waste water treatment system (Bid Report, 49).

The RMOW gained ownership of the permanent facilities post- Games to provide the Whistler community with affordable resident worker housing and a High Performance Centre to be used in conjunction with the on-site Whistler Athletes’ Centre (Sustainability Report, 120). The temporary aspects of the village were relocated to several other communities in BC (Bid Report, 49).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The Whistler Athlete Village in its infancy of planning had the potential to provide the greatest legacy to the Whistler area based on needs for the community. Post-Games, the village has become a hostel, a high performance athlete training centre, and the Cheakamus Crossing residential community set for Whistler locals (Anderton 2010). The hosting of the Olympics provided Whistler with a 300-acre plot of land to construct the athletes’ village; however, through a quote, by Ken Melamed, aware that the RMOW only utilized a portion and have left themselves with a reserve to develop as they wish:
“We only used about 75 acres for the athlete's village, so there's still a tremendous reserve there that the community can draw down over the years. (Inwood 2014).”

Environmentally, the athletes’ village is one of the pilot projects for green neighbourhoods initiated worldwide. The infrastructure, construction materials, and design of the neighbourhood all take environmental sustainability initiatives and put them into action.

Economically, the three-year construction project incorporated local trades to stimulate the local economy leading up to the Games. Post-Games, the village contains the Athletes’ Centre which houses up to 100 beds and a high performance training centre; these additions should continue to generate economic growth through both summer and winter in the RMOW. Prior to the Games the need for housing resulted in the Whistler workforce struggling to find housing, and as a result being placed on waitlists for accommodation.

The Olympics and the Athletes’ village has made an impact in lowering the burden of workforce housing, however the increased praise and attention the RMOW has received towards its tourism and lifestyle offerings is equating to similarly large waitlists for housing (Colebourn 2016). The aids to affordable housing also contributes to the social legacy of the Whistler Athletes’ Village as it will be home to the Cheakamus residential neighbourhood; the neighbourhood has the potential to grow to three times the villages’ size in 2010. The village was designed to allow full accessibility as its role of Athletes village was for both the Olympic and Paralympic Games. In the quote below by Ken Melamed from the newspaper article ‘Whistler used Vancouver 2010 as a catalyst
for community goals’ authored by the IOC (2014), he highlights the goal is to have the majority of Whistler’s workforce housed in this neighbourhood (Green Building Brain n.d.); due to this attempted legacy, VANOC chose to incorporate this permanent structure into the planning instead of temporary structure.

“It was intentionally designed so that it would provide about 85% local resident housing at below market prices. It’s become a fantastic new neighbourhood for Whistler and a place where local residents can buy a property and actually call Whistler ‘home’.”

Additionally, there were also temporary facilities included to constitute the Whistler Athletes’ Village. These temporary modular structures will be relocated to six different communities across BC in need of social housing. The communities were responsible for providing the land, and along with the provincial government prepping the foundations these structures will utilize to make them permanent in these municipalities (Burke 2009; Mackin 2009).

As mentioned above, the primary legacy of the Whistler Athletes’ Village was to provide affordable housing in an effort to better solidify the Whistler workforce. In John Colebourn’s (2016) newspaper article ‘Whistler Workers Face Grim Housing Prospects’, there are two examples drawing attention to individuals forced to turn down work or resort to poor living conditions in order to work, and a difficulty for resorts to retain employees:
“I will be sleeping in my car, I’m a long-time local but I am homeless. I will try to couch surf with these cold conditions, the car is my last resort. I know studios that are going for three grand, it is really getting out of hand (Billy Hosking, an Australian living and working in resort for four years).”

“We have new product coming on, we know the demand is strong and we continue to build. The businesses who have staff accommodation, it is a huge advantage for them to retain workers (Marla Zucht, General Manager of the Whistler Housing Authority).”

Through the means and necessities of the Olympic Games, the village that was constructed has accomplished what it was designed to accomplish with regards to providing aid in the affordable housing sector. The business negotiations and acquiring of land surrounding the village site has enabled the RMOW to construct further and have reserve lands to adapt to the needs of the community. The renewal of this land, through hosting the Games, and praise received from tourism magazines and athletes alike, have assisted in the quick rejuvenation of Whistler and the economic stimuli for its ‘more permanent population’.

*Whistler Athletes’ Centre*

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

Throughout the Bid Book, there was minimal mention of the Whistler Athletes’ Centre (WAC) serving a purpose during the Games period. There was mention however of the Olympic Village Whistler serving a similar role in a portion of that facility during the Games period and being transitioned into an Athletes’ Centre post-Games. The
facility was intended to remain under the ownership of WLS; the purpose of the facility was to provide permanent accommodation to athletes, easing their ability to train at Whistler and continue the stream of competitions occurring at Whistler.

The WAC has integrated the community, elite athletes and potentially elite athletes, providing community meeting, educational, and training spaces within the facility. The space and services operate on a cost recovery basis, to ensure the facility is accessible for athletes wanting to train and event organizers attempting to host in Whistler. In addition to local and national athletes, the WAC was projected to play a role in aiding Canada’s Sport Outreach Programs, providing training opportunities to nations who have difficulty accessing winter sport facilities to train (Bid Book V2, 197).

*VANOC Completed According to Final Documents*

During the planning and organizing phase leading up to the Vancouver 2010 Winter Games, VANOC deemed it appropriate to construct a new and permanent facility in Whistler, the WAC. The facility was and continues to be used as an athlete and community development facility post-Games under the ownership and guidance of the WSL. The WAC provides affordable accommodation options for athletes, residents, and visitors, in addition to the High Performance Centre which provides training facilities for elite athletes.

The environmental assessment study conducted on the WAC was completed in conjunction with the Olympic Village Whistler, resulting in many similarities between the two pieces of infrastructure. VANOC targeted LEED Silver on the High Performance Centre training facility, and WAC connects to the District Energy System developed in conjunction with the Olympic Village. Waste heat recovery systems were installed in all
accommodations buildings and modular construction; generated less construction waste, and used non-toxic, zero volatile organic compound white glue for structural applications; construction also incorporated the use of Forest-Stewardship Council-certified wood. Further legacy initiatives of this facility included the installation of Aboriginal art from the Vancouver 2010 Venues’ Aboriginal Art Program, and having the entire facility designed with accessibility for all at the forefront (Sustainability Report, 120).

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

As a LEED Silver certified infrastructure, the Athletes’ Centre provides environmental legacies to the region, utilizing heating sources generated from sewage treatment plants, and rejuvenated a plot of land adjacent to a landfill, renewing land which would typically go undeveloped (Larigakis Architecture n.d.):

“In its 2010 awards held in March, the Modular Building Institute selected the Whistler Athletes' Centre Lodge as the best permanent modular building in North America based on architectural excellence, technical innovation and energy efficiency (Mackenzie 2011).”

Economically, the Athletes’ Centre needs to be self-sufficient of the infrastructure and legacies managed by the WSL; this is the infrastructure that does not receive aid from the endowment fund made available by the Governments of Canada and BC (Whistler Sport Legacies 2011). In an interview with BC Almanac (2016), Roger Soane, the president and CEO of WSL, discussed the WSL’s views of the Athletes’ Centre as a great asset to the community because of what it provides the athletes when they visit the area:
“we also have the legacy of the Whistler Athletes' Centre which is a great asset for Whistler, and people coming to do sports in Whistler. We have a hotel there, which is 80 rooms, and we also have long term accommodation for athletes to stay and train in Whistler.”

The Athletes’ Centre has been expanded to include lodge accommodations and townhouse accommodations which are rented by the night and week, or month and year respectively. Services include a High Performance Training Centre, the ‘Performance Hub’ for fitness classes, and meeting spaces (Whistler Sport Legacies n.d. (1)). Specifically, the Athletes’ Centre is home to the Canadian Sport Institute Pacific; OROS, Whistler Gymnastics Program; and the Whistler Adaptive Sport Program (WASP) (Whistler Sport Legacies n.d. (2)).

The WSL has made efforts to expand the interest in their facilities throughout the summer months, and have partnered with multiple organizations with regards to the Athletes’ Centre as well. As listed above, the facilities have been rented to other organizations, both for-profit and non-profit alike, to manage the programs offered within the Athletes’ Centre. WSL also partners with camps and sport organizations to offer accommodation for lower costs during the summer months (Stahr 2013; BCBSA 2014)

In terms of legacy, the Whistler Athletes’ Centre, in theory, was developed to ensure the constant presence of elite athletes in the RMOW for training purposes. Through the management of WSL and their efforts to provide opportunities to achieve “youthful exuberance and the joy that is derived from participation in sport (Around the Rings 2008)” the centre has found opportunities through partnerships to integrate the general public with elite athletes at the same time. This atmosphere, is what has allowed
the centre to be appreciated and supported by the community, despite the cost overruns, during the construction phase leading up to the Olympics (Mackin 2007).

**Tertiary Hard Infrastructure Projects**

With respect to formatting, this section is similar to the ones above, with the exception being this section is comprised of Tertiary Hard Infrastructure projects listed relative to their names during the Games period (see Appendix 4). Each project was then discussed according to the intent of the Bid Corporation, the actions taken by VANOC, and the impact each project had on the community relative to Urban Planning, Urban Renewal, and Legacies.

**ECOMM**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated by the Bid Corporation in the Bid Book ECOMM, the emergency communications headquarters for the region during the Games period was to be located in an existing, province of BC owned, emergency operations facility needing renovations. The renovations to the facility were to remain permanent helping serve the emergency operations department post-Games.

The province of BC, the Vancouver Police Department, and the regional RCMP all utilize a standard system- British Columbia Emergency Response Management System- established by the province of BC in the 1993 Emergency Program Act, to be better equipped to handle all hazards from one central location. The emergency communications facility was also the location of the City of Vancouver Emergency Operations Centre as well as the Regional Emergency Coordination Centre, which were
both intended to be utilized as command centres for Games security and transportation (Bid Book V3, 35).

**VANOC Completed According to Final Documents**

Although throughout the final documents published by VANOC there was no mention of ECOMM, its purpose, or where it was to be located, VANOC did renovate and utilize the existing emergency communications centre. The facility housed the Vancouver 2010 Integrated Security Unit (V2010 ISU), and was known as the ‘Integrated Command Centre’ (ICC) during Games time (Sustainability Report, 67). The unified location between the V2010 ISU and other emergency response teams allowed the ISU to act as the interface between VANOC, and all collaborating safety authorities.

**How Does this Impact Urban Planning, Urban Renewal, and Legacy?**

To elaborate on the information provided above, the V2010 ISU was composed of multiple levels of response personal relocated from across Canada to aid with the event (Plecas et al. 2010). The ECOMM facility provided the ability to house all required taskforces including VANOC’s transportation unit and V2010 ISU, as well as the dispatch centre for local law enforcement and emergency response personnel. The facility was developed originally in the early 1990s because of catastrophic events in San Francisco; however, in Vancouver the ECOMM facility manifested as a retaliation to the riots that began after the Stanley Cup Finals loss in 1994 (ECOMM n.d.). With all response personnel located within one facility, communicating on one system, response times are lower and miscommunication is limited. VANOC and the V2010 ISU smartly, located themselves within that culture to stabilize their function and communication with the dispatchers to act as a unified voice to respond to situations during the Games.
Although the building underwent a renovation leading up to the Games to enhance the technological capabilities of the facility (City of Vancouver n.d. (3)), in a quote below according to Barbara Desjardins, CRD Board Chair, in a Douglas magazine (2016) article ‘CRD Board Supports Amendment for Unified 911 Call Centre,’ the need for a new facility for unified service was establishing itself.

“The establishment of a unified centre in the region will contribute to achieving the CRD Board’s Strategic Priority to collaborate with partners to prepare for, respond to and recover from emergencies. It also creates the opportunity to achieve operational and cost efficiencies, and to upgrade facilities to a post-disaster standard and modernize equipment.”

The new facility was projected to be relocated due to the increased interest from municipalities in BC to join with the unified service, resulting in a need for a more centralized facility with additional space. A success of VANOC is that they did not over extend and construct a new facility for the housing of their temporary V2010 ISU, as well as the region in not agreeing to construct a new facility prior to their being a need. The facility satisfied the requirements for the Games time, and only recently as a result of increased interest in the service, has their become a need.

**SkyTrain**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, the SkyTrain transportation system was owned and operated by Translink pre- and post- Games. There was a need to improve the system, and the upgrades were intended to occur regardless of the success of the bid. The automated light rail transit (ALRT) system was to receive permanent upgrades and
additions to already existing train routes; including the construction of a line connecting the airport and Richmond to downtown Vancouver (Bid Book V3, 63- 71).

**VANOC Completed According to Final Documents**

This project was under the direct control of government and VANOC had little to no influence on the project, other than providing a reason to expedite the construction process. The construction to the SkyTrain transportation system was fulfilled, specifically constructing ‘the Canada Line’ attaching the airport in Richmond to downtown Vancouver. The ownership of this line remains with Translink post- Games (Sustainability Report, 26). Due to the construction process being out of the scope of VANOC due to funding of government, the VANOC reports deemed it unnecessary and impossible to report on sustainability.

**How Does this Impact Urban Planning, Urban Renewal, and Legacy?**

The Canada Line construction development began in 2005 as a public-private partnership (P3) between the private firm SNC-Lavalin and the Province of BC. Translink continues to operate the existing two train routes, while SNC-Lavalin manage and operate the Canada Line. The Canada Line as of September 2014, averaged 120,000 riders per day which equates to eliminating carbon emissions from 10-lanes of highway traffic per day (SNC-Lavalin 2014; Bula 2014). Although the Canada Line has been successful in moving people, the success is not justified for all businesses. In the quote below, Leonard Schein, owner of the Park Theatre, stressed the Canada Line has brought people away from the areas businesses due to the lack of a stop close to their locations, which is escalated by the cutbacks to other forms of public transportation to encourage the increased use of the Canada Line:
“They have not seen an increase in business due to the Canada Line because the station that was originally going to be at 16th was replaced by the Olympic Village station and in order to get more passengers to take the Canada Line the bus service was cut down on Cambie so the buses don't run as often. (CBC News 2010)”

Doug Allen, CEO of InTransitBC, describes below how the P3 enabled the government to explain what they wanted accomplished without having to finance the entire project, or attribute the resources to decision-making and construction tasks:

“If you’re meeting all of your targets from an operational perspective, and you’re meeting the public’s need based on their response, that’s success. (Bula 2014)”

Jane Bird, Translink’s lawyer throughout the construction project, emulated governments need to determine what they want to achieve, large picture, and what they want to ensure the private sector contributes to the project. Additionally, communication relative to the construction process, and what is trying to be achieved with reasons is important with important stakeholders, business owners, supporting citizens, and opposing organizations:

”I would have spent more time talking to the public and elected officials about how innovation works. There were all sorts of good public reasons to do (cut and cover). (Bula 2014)”

In a Globe and Mail news article authored by Frances Bula (2010), Jarrett Walker an Australian based international consultant in public-transit network design, argues that compared to other similar projects in similar geographic regions, Vancouver has become
a model for sustainable transportation through its ease of operation, service it provides, and economic gains:

“Both lines are really important. Both are part of what are going to be incredibly successful systems. But Vancouver is out in front. It's because their system is driverless. The reason I talk about Vancouver all over the world is that it's a system you turn on in the morning and it can go all day without costing any more. (Bula 2010)”

Despite the success, the Canada Line has been praised with locally, nationally, and internationally, there are situations to learn from. As stated by Jillian Glover, a local resident with a Master’s thesis completed on the impact of construction on the Canada Line to local businesses, it is proven that there is a need for proper engagement and consultation with parties with any chance of being impacted by decisions regarding the development of a project. A lack of consultation was evidenced with the Canada Line and although the Line has been a success with the City of Vancouver and surrounding communities’ projection to construct further Translink lines, a larger community voice appeared with concern over construction practices, goals and plans (Glover 2011). This saga exemplifies the importance of collaborative planning, and communicating objectives and goals of all stakeholders involved. The Canada Line has provided urban renewal to the communities of Richmond and Vancouver, with all the potential stops between as evidenced with the surreal amounts of ridership and demand for further SkyTrains; however, the road to achieving these successes could have been a larger success in its own right.
Vancouver Street Cars

Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, the city of Vancouver was to introduce Vancouver Street Cars as a means of transportation throughout the city, servicing the Olympic Village, BC Place, General Motors Place, and the MPC. This new means of transportation was to be owned and operated by the City of Vancouver and remain permanent in the post-Games era (Bid Book V3, 73).

VANOC Completed According to Final Documents

VANOC was not solely responsible for the implementation of Street Cars during the Games; however, they were involved from a distance. VANOC’s sponsor partners were responsible for aiding in sustainability efforts through sponsorship; the City of Vancouver and Bombardier were stakeholders who implemented the use of street cars throughout downtown Vancouver to limit cars used, and increased use of public transit. One specific example of increased street car use was the ‘Olympic Line’ which connected Granville Island to the Olympic Village station in Vancouver.

How Does this Impact Urban Planning, Urban Renewal, and Legacy?

For the 2010 Winter Olympic Games, the City of Vancouver reached an agreement with Bombardier Transportation to host a streetcar pilot project during the Olympic Games. The pilot project named the ‘Olympic Line’ lasted 60 days and included two streetcars on loan from Brussels Transport Company (STIB). Speaking on what the Streetcars offer a community, Mr. Alain Flausch, Managing Director of STIB, spoke highly of what the streetcars could offer:
“On behalf of STIB and the People of Brussels we are very proud that two FLEXITY Outlook streetcars from our fleet in Brussels will be enjoyed by both residents and visitors during Vancouver’s hosting of the 2010 Olympic and Paralympic Winter Games. As an integral part of our transportation network, the 100% low-floor FLEXITY vehicles provide efficient and reliable service for the people of Brussels. (Bombardier 2008)”

At the completion of the Games and the pilot project, Thane Royce, a local streetcar user, was one of many residents and frequent users to relay their hope of adding a permanent streetcar service in Vancouver due to the convenience it provided in navigating the city:

“We need more of these type of lines. We need this line to go all the way out to UBC or something. We need to get out of the cars and into these things. (CTVbc 2010)”

Dale Bracewell, a city of Vancouver engineer, is one member of the city of Vancouver that has admitted that this pilot project is not a one-time deal, but rather an audition to showcase and test a future mode of transportation throughout the City:

“Our Olympic peak day, we had actually 25 thousand people take advantage of this modern and exciting transit experience and this opportunity to see this new type of transit that maybe we'll see in Vancouver in the long term. (CTVbc 2010)”
In 2010 on the last day of the pilot projects operation, Vancouver Mayor Gregor Robertson acknowledged the success of the Olympic Line; however, was pessimistic on the likelihood of a streetcar being implemented permanently due to the high cost of such ventures and probable lack of support from provincial governments and associated transportation organizations in the province. He also addressed how rare it is for a city to receive such extensive upgrades to other forms of transportation, and that other areas of the province had been neglected to provide the advancements to Vancouver (Bailey 2010). In 2016, the City of Vancouver purchased land from the rail company, Canadian Pacific. Mayor Gregor Robertson was quoted in Kenneth Chan’s (2016) article ‘Why light rail transit is needed on the Arbutus Corridor,’ stating the land was purchased for the sole purpose of developing a light-rail train system or streetcar system to service the communities’ transportation needs:

“For our transportation future, this is an important corridor and one that we want to preserve. As the city grows, there will be undoubtedly be more pressure and need for transportation improvements so we want that option to remain open for the city. It is impossible to acquire a strip of land like this anywhere in the city.”

As of 2016, when the newest streetcar project began, the Canada Line connecting Richmond to Vancouver is more rapidly than expected approaching its capacity and a secondary transportation system is in need to relieve and prolong the usefulness of the Canada Line (Chan 2016).
The costs associated with a streetcar project are high and with the other requirements and advancements having occurred in the municipality, mandating taxpayers with another fee would not have been ideal. The route taken, launching a short term pilot project with expenses covered by a private partner, addressed the need of increased transportation during the Games time, as well as providing the community with an opportunity to experience a service. The city could then gauge the success of this service and potential improvements to better provide for the community. The system reduced traffic, in turn reducing carbon emissions and allowed better flow throughout the city. Overall, at the time of the Games and shortly thereafter, Vancouver, British Columbia and provincial transportation providers did not have the financial ability to invest in another transportation service. The way they approached this situation exemplified pristine planning and discipline.

**Sea to Sky Highway**

*Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, construction upgrades to the Sea to Sky Highway connecting Whistler and Vancouver were to be completed. The highway, part of the Province of BC’s highway network, was to remain a permanent piece of infrastructure post-Games. The project was intended to be funded by the province, and constructed regardless of the bid being successful.

The highway was planned to provide flexibility, with given lanes having the ability to be altered for direction of travel, depending on what traffic demands dictate. For example, during peak times, there may be three lanes northbound and one southbound, versus the normal two-lanes in each direction. To aid with traffic, permits were to be put
in place, to limit drivers authorized to travel on highway during designated peak hours (Bid Book V3, 67).

**VANOC Completed According to Final Documents**

VANOC, although having no say in the construction process, facilitated the completion of the Sea to Sky Highway in time for the beginning of the Games. The highway served as a catalyst for transportation between Whistler and Vancouver for athletes, IOC family, and spectators alike. Post-Games, the highway continues to serve the communities transportation needs under the operations of the government of BC (Knowledge Report, 26). Due to the construction process being out of the scope of VANOC due to funding provided by the government, VANOC reports deemed it unnecessary and impossible to report on sustainability.

**How Does this Impact Urban Planning, Urban Renewal, and Legacy?**

The Sea to Sky Highway prior to construction efforts leading up to the Vancouver Olympics had a reputation as “the highway of death,” where collision rates had risen to average 223 per year between 2001 and 2007. Whistler community leaders, including Whistler RCMP spokesman Staff Sgt. Steve Leclair and Mayor Nancy Wilhelm—Morden quoted below from Dhillon (2015) ‘BC’s Sea to Sky Highway Sees Significant Drop in Deadly Collisions’; and Rob Ahola, the engineer who supervised the sea to sky highway construction project, quoted from Ian Austen’s (2010) article ‘Olympic thrill ride, mostly on 4-wheels,’ are aware of what the new highway provides in terms of safety and accessibility to Whistler:
“That drive used to be very, very treacherous. It was a very circuitous road. Basically, you were driving next to a rock face around sharp turns. (Staff Sgt. Steve Leclair) “

“It had a very high accident rate; but the severity of the crashes was also exceptional. (Rob Ahola)”

“With the road having been straightened, with much of it [having] concrete medians in the centre, with pullout lanes and so on, it makes for a safe, beautiful and actually faster drive than ever existed before. (Nancy Wilhelm-Morden)”

In 2002, it was these same factors the IOC stressed as they questioned the readiness of the region to host an event with the magnitude of the Winter Olympic Games. Kevin Falcon, BC’s transportation minister from 2004 until June 2009 and BC Premier Gord Campbell are quoted below from Fowlie’s (2009) article citing this negativity surrounding the highway, from the body responsible for selecting the best bid, piloted the efforts of BC to improve the conditions of the Sea to Sky Highway faster than they ever anticipated having to act (Dhillon 2015; Casselman 2008).

“This was one of the most dangerous stretches of highway in the province, and a lot of people forget that. We started out with not doing this because of the Olympics. This was something that we announced we were doing before we were awarded the Olympics. But I think the Olympics provided a real reason ... to do it and get it done well. (Kevin Falcon)
“Between ’96 and 2000, there were over three dozen people who lost their lives on that road. Obviously, that’s an area where we’re going to have to be investing in the next number of years, whether there’s an Olympics or not. (Gord Campbell)”

Although the improvements to the highway had been deemed warranted for many years by the statistics provided by government, and government’s swift reaction time to demands by the IOC, some argue the highway received extensive additions beyond the need. Some critics recommend the highway was a ploy to enable Vancouver’s urban sprawl to include nearby communities such as Squamish, where others such as Ian Bruce, a climate-change specialist at the David Suzuki Foundation cite the environmental impact, and the effect the highway will have on other modes of mass transportation, including the railroad (Austen 2010). During the Games, there were other means of transportation between Vancouver and Whistler including a railroad system which operated daily, unfortunately for the purpose of the Games period, tickets to utilize the railway service were by invite only (Austen 2010). Furthermore, the town of Squamish which is located geographically in the middle of Whistler and Vancouver did not receive the economic gains they were led to believe they would attain from the Vancouver Olympic Bid Book and Olympic organizers. In a CBC News article ‘BC Town’s Olympic Dreams Dashed’ (2010), Danielle Dobson, Squamish resident and real-estate broker and Sylvie Pail lard, editor of the Squamish newspaper The Chief, are quoted discussing their feelings towards the highway and the Olympics in general. Despite gratitude towards the improvements of the highway, Squamish was neglected in other promises including various other forms of transportation stopping in the community:
“It's made the trip to Squamish from Vancouver much quicker. But that's not much help if people don't want to stop. (Danielle Dobson)"

“Squamish isn't very enthusiastic right now about the Olympics; many of the expected Olympic benefits the town of 15,000 was hoping for have failed to materialize. In the [Vancouver Olympic] bid book there were [promises of] at least attempts at trying to build a ferry terminal, and also to get some trains to come through here as well. (Sylvie Paillard)”

According to Boyd Cohen, from Simon Fraser University's Center for Sustainable Community Development and Linda Coady, VANOC’s vice president of sustainability in Anne Casselman's (2008) article ‘Highway of Good Intentions? Vancouver Olympic Plans Bulldoze Rare Forests’, environmentally, the Sea to Sky highway could be argued to have gone against everything the Vancouver-Whistler Bid Corporation and VANOC set to accomplish. Through the bid and hosting of the 2010 Winter Olympics, the intent was to provide aid to the City of Vancouver, RMOW, and province of British Columbia in their efforts to go green.

“That is one of the reasons Vancouver won [the Olympic bid] was because we pitched that we'd be the greenest Olympics ever. (Boyd Cohen)”

“We do not contribute money to, and we are not managing, those projects. They are being built for a lot more than the 17 days of the Olympic games anyhow. (Linda Coady)”

Despite VANOC not contributing to the Sea to Sky Highway, they could have played a larger role in ensuring the government aligned themselves with the Bid as well as their own initiatives to become a more sustainable province.
Through the design and development of the highway, as evidenced in a direct excerpt from an environmental assessment compiled by the British Columbia Ministry of Transportation provided in Casselman (2008) article, the route selected divided a forest considered to be a rare ecosystem by the government themselves:

“The proposed tunnel option for part of the Horseshoe Bay alignment area is the preferred alternative from a wildlife and vegetation perspective, based on the high concentration of highly sensitive and good quality habitats along the at grade alternative.

Researches including Diane Srivastava, an ecologist at the University of British Columbia-highway-environment and Arne Mooers, a biodiversity biologist at Simon Fraser University agree:

“The multilane highway disrupts important dispersal processes for wildlife populations. So there will probably be a long but inevitable walk to local extinction for those species. (Diane Srivastava) “

“We know the strongest predictor of species loss is habitat loss. The whole place has been ecologically damaged beyond repair. (Arne Mooers)”

The objective of the construction project was to provide a straighter highway with better sightlines to allow more consistent driving speeds. The actions taken to achieve this were widened and paved shoulders, emergency pull-offs, and slope management systems to limit the effect of falling rock from surfaces surrounding the highway (Road Traffic Technology n.d.).
Overall, when analyzing the Sea to Sky Highway and the effects of decisions made throughout the design and construction process, it is necessary to identify the main areas of complaints and notice who is fully responsible for managing the project. First, VANOC had very little influence in the managing of this project. Yes, they were influential in bringing the Olympics to the region; and the IOC was the catalyst behind the project having a rapid deadline. However, the project was in discussion within government prior to the Olympic bid due to security concerns, and assessments were conducted in preparation for when the decision was made in the future. The city of Vancouver, the RMOW, and the province of BC all recognized the need for a safe and reliable highway framework throughout this region to connect the two municipalities, also being the major influencers creating policies to become sustainable communities through their ‘Greenest City 2020 Action Plan’. On the basis of the primary goal of providing a safer highway to connect the two municipalities, the project was a success; the decision making process they adopted, however, was not aligned with the goals of the region. This shows a neglect of planning principles and urban planning to align the community with their own goals separate from this singular project.

**Waterway SeaBus**

*Intent Based on the Vancouver –Whistler 2010 Bid Corporations’ Bid Book*

As stated in the Bid Book, Translink were to potentially receive improvements to their arsenal of existing Waterway SeaBus. The passenger only ferries connect to other local transit, and currently utilize two catamaran ferries. The intended improvements were the addition of a third ferry added to the rotation by the 2010 Games; additions to
the fleet were to be permanent, and remain under the ownership of Translink (Bid Book V3, 73).

**VANOC Completed According to Final Documents**

VANOC had no input in the financing of a third SeaBus catamaran, and therefore no power in the decision making process to incorporate another catamaran into service. However, due to the initiatives set out on by VANOC to increase the use of public transportation during the Games, a third SeaBus was added to the fleet in April 2009 for the duration of the Games (Translink n.d.).

**How Does this Impact Urban Planning, Urban Renewal, and Legacy?**

Although prior to the Olympics, a decision was made to decommission one of the existing SeaBus (CTV News 2009), all remained active with a fourth SeaBus incorporated in 2014 and a fifth SeaBus integrated in 2017. In 2017, the oldest vessel was retired, with another being upgraded. The municipalities serviced by the SeaBus consisting of those in the lower mainland are responsible for the operating costs related to the SeaBus fleet, where the province and Translink cover the capital costs of the fleet (Seyd 2016).

The SeaBus began operation on 17 June 1977, in an effort from the municipality of Vancouver to avoid falling victim to ‘the car’ and ‘the interstate’ mentality as major nearby cities like Seattle had. The SeaBus was an alternative to bridges and highways disrupting the flow of the city, instead incorporating ferries into the transportation system (Richter 2017).

Similarly, to the Sea to Sky Highway, VANOC had little influence on the SeaBus, other than providing the reason to strengthen the transit systems in the Vancouver and
lower mainland region. The SeaBus is aligned with the model of sustainability surrounding the region and provides the citizens with another mode of sustainable mass transportation.

Technology Infrastructure

Intent Based on the Vancouver – Whistler 2010 Bid Corporations’ Bid Book

As stated in the Bid Book, the Telecommunication and Internet infrastructure would be modernized to provide better service and handle increased capacity, along the Sea to Sky Highway and throughout the mountain regions by the multiple communications companies in Canada (Bid Book V3, 109). There was already sufficient infrastructure in place which belonged to service providers and was intended to remain theirs after the upgrades occur; however, the installation of fibre optic cable was needed to connect the venues and media sites in Whistler to communications towers; as well, in Vancouver fibre optic cable was needed to connect the local venues (Bid Book V3, 103). If alterations or upgrades were deemed necessary, by the IOC or VANOC, to enhance the spectator experience of the mountainous regions, additional financial support was made available to implement the technological improvements to the region.

VANOC Completed According to Final Documents

The extent to which VANOC contributed to communication technologies in the region remained largely unaddressed except for minor details of their arm’s length involvement with telecommunications sponsors, Bell and Nortel. Bell was responsible for improving the IP and Wireless networks, implementing hundreds of kilometers of fibre optics cable between Vancouver and Whistler, utilizing Nortel’s materials and systems to make this Games the first all IP-network Games (Sustainability Report, 110-112).
How Does this Impact Urban Planning, Urban Renewal, and Legacy?

The Winter Olympic Games, like other mega-events, stimulate the need and development of new technologies. The demand for constant media coverage of the Games, the need to move mass amounts of the people, for host cities to out-do previous hosts in what venues provide and appear to be, and the advancements of services to the general public all increase the need of new technological infrastructure. These demands and the pressures of meeting them were addressed by Ward Chapin, VANOC’s senior vice president of technology and systems in CCNMatthews (2005) article ‘Vancouver 2010 names Senior Vice President of Technology Stems as 2010 Olympic and Paralympic Games team grows’:

“Canada is my home and I am looking forward to this tremendous opportunity to contribute to the successful preparation and staging of Canada's 2010 Winter Games. This is an exciting challenge as the Games are a huge and unique consumer of technology - from venues to procurement, logistics to media operations - each functional area will require reliable systems for smooth and efficient delivery of the Games.

(Ward Chapin, VANOC’s senior vice president of technology and systems- Technology- honour)”

In terms of specific technological infrastructure laid, Bell was the Premier National Partner tasked by VANOC to provide the services they promised the IOC. In the following quotes by Ward Chapin and Justin Webb, Bell’s Vice President of Olympic Services from a BCE (2009) news release addressed the demand for infrastructure improvements and the capacity of infrastructure contributed by Bell:
“We committed to the International Olympic Committee (IOC) that we would develop, test and deploy a reliable, secure and highly available network infrastructure. The technology solution Bell delivered to VANOC not only meets IOC and broadcaster requirements, but exceeds their needs with 99.999% reliability. Bell has been our partner every step of the way, integrating seamlessly into the VANOC team. (Ward Chapin)”

“Not only have we put the technology in place to be Games-ready faster than any host country before us, but we are the first to build an entire Olympic Games network from scratch. We have almost 300 km of fiber optic cable running from Vancouver to Whistler, connecting 130 Olympic and Games-related venues. Bell also engaged in a competitive recruitment and onboarding process that has resulted in our top technical experts from across Canada coming together to deliver a flawless Games in 2010. (Justin Webb)”

The Olympic Games not only provide a competitive atmosphere in the field of play, but also amongst hosts and corporations to provide the best experience for everyone at the Games, or watching from afar. The technology provided by Bell and VANOC, enables the region hosting the Games to have modernized technologies of the highest capacity for years after the Games.

**Other Legacy Pillar Projects**

In this section, the legacy projects relating to the remaining pillars of legacy have been introduced and explained briefly. The remaining pillars include Soft Infrastructure; Economic; Environmental; Sport; Information and Education; and Public Life, Culture
and Politics. Relative to each pillar of legacy are the initiatives discussed in the Vancouver-Whistler Olympic Bid Book and what legacies were carried out by VANOC and their partners. Each project listed is what was identified in either the Bid Book or the final documents from VANOC; with each legacy project discussed based on the information provided in the documents. In some cases, the projects introduced by the Bid Corporation were general ideas and VANOC created the programs with differing names or slightly differing parameters. In other instances, legacies were created by VANOC, which were not outlined by the Bid Corporation. Charts containing the legacy projects (Appendix 5) are available for reference.

Soft Infrastructure Legacy Projects

Social and Community Impact Assessment

Through hosting the Olympic Games and the distribution of information and education aids, the intent from the Bid Corporation was to provide the locals of Vancouver and Whistler the base knowledge to feel better informed and educated with things happening in the community and intentions and outcomes of the Games. It is difficult to fully gauge the outcome of this legacy within the scope of this study. VANOC in their final documents did not specify their beliefs or proof to the results from this legacy. The potential that local residents became experts of all affairs in the community is unlikely. However, VANOC, levels of government, and residents should be pleased if all parties feel comfortable and understand the decisions that were made by decision makers throughout the planning process of the Olympic Games and soon after in the post-Games era, transitioning venues to legacy mode.
Test Events and Olympic Games

When hosting the Olympic Games, it is standard to host test events in the form of World Championships, to ensure the venue is fully functional and capable of hosting an event. Through these test events, the staff are also given experience in the form of live action, and gaining the skills and training necessary to be capable of hosting the Olympics. These experiences for the municipality, sporting venues and staff produce an event portfolio to bid for future competitions (Bid Book V2, 17).

OCOG Advancing Role of Women in Sport

The platform the Winter Olympics provide organizations to the world, key leaders from Vancouver, VANOC, and other related organizations portrayed the importance of allowing women to advance in roles of organizations through sport. VANOC and associated organizations were invested in projecting the message that women are entitled to opportunities, just as men, are and should share success, needs, and contribute to improvement of sport internationally (Bid Book V2, 19).

Local Team of Technological Implementation Experts

Through the hosting of various events, sporting and non-sporting, prior to the Olympic Games, there were a committed group of workers with on-mountain experience implementing new technological infrastructure in the region. With the technological advancements required for the Olympics, this group of workers gained further experience installing, managing and operating the new systems put into place (Bid Book V3, 103).

Z2010 SMRS and SSET

Canadian Standards Association collaborated with VANOC2010 to create Canadas first sustainable event management standard for organizers, a sustainable
governance model utilized to foster cross-functional responsibilities and accountability to commitments. It was created and first used by VANOC having adapted existing environmental models to incorporate economic and social returns. These tools were developed with the IOC and International Academy for Sport Science and Technology, and is currently being used by many sport organizations and events. The individuals that helped establish this tool, making it useful for future hosts and event planners, gained the knowledge and expertise to be consulted in the future.

**Economic Legacies**

*Vancouver OCOG Asset Disposal*

Through planning their asset disposal in advance of the Games, VANOC utilized planning skills and strategies to provide equipment and tools to organizations that could benefit from and utilize them. Most of the disposal was at no cost; however, there was an auction in which proceeds helped make payments to provide aid and relief to the budget (Bid Book V1, 71).

*Licensed Merchandise*

Merchandise is one of the easiest and simplest ways for supporters to associate with and access the Games. Through the sale of goods, the projected royalty revenue from the licensed merchandise was expected to reach $22.6 million (Bid Book V1, 97).

*Coin Program*

As a commemorative piece of the Games, the coin program was available nationally and internationally and acted as a legacy of the Games. The legacy was expected to generate $19 million and is symbolic of the event in Canada (Bid Book V1, 97).
**Future Hosting**

With the investments made to primary, secondary, and tertiary hard infrastructure, the region was made capable of hosting events in the future. These future hosting opportunities have the potential to generate economic prosperity for the region and businesses if leveraged correctly. These future hosting opportunities also limit the stress placed on venues to utilize the Games Operating Trust set up for certain venues.

**Tourism**

The Olympic Games’ reach is international, and the attractiveness of the Games has potential to draw people to the hosting region to view the venues and landscape not only during the Games, but in the lead up to the event and after it. In the case of Vancouver and Whistler, the tourism industry was proactive and fully engaged in planning processes to implement marketing strategies and capture the full potential of hosting (Bid Book V3, 115). British Columbia’s improvements to transportation systems and sporting infrastructure, both recreational and high performance, have gained a reputation as world-class in the winter sports scene. As discussed in previous sections of this report, community leaders were attempting to advance the attractiveness and awareness towards the region for year round tourism success.

**Construction**

When hosting the Games, preparations and construction is inevitable. VANOC tendered all construction projects open and bondable; meaning if a firm had the experience necessary to handle the project, they were considered, with first preference going to local firms from British Columbia. The venues complied with local regulations;
funding for federal and provincially funded projects also met the requirements of the federal and provincial governments (Bid Book V2, 137).

Bell’s Games Sponsorship

Through the findings in this research, VANOC was responsible, as the Olympic Organizing Committee, for many construction projects relative to the Olympic Games and ensuring the hosting community was acceptable according to the requirements of the Games based on the IOC and various sport IF’s. Relative to the tendering of projects, VANOC attempted to provide opportunity to local business and construction firms. It is impossible to determine if they could have or should have utilized local firms more due to multiple variables including cost, expertise, and scope of work for beginners. There were occasions VANOC consulted and hired teams from abroad to incorporate design and construction firms in the construction of sports venues because of those firms’ expertise in the field. In addition to the initiatives they were primarily responsible for, VANOC utilized their authority to leverage the Games and incorporate their sponsors to meet the requirements of the Games, as well as increase community support and inclusion; one example is the Bell’s Games Sponsorship. The sponsorship consisted of $2 million funding to continue to encourage the inclusion of inner-city businesses and residents in the pre-Games period. The efforts of VANOC to develop initiatives to include local business were a way VANOC took a secondary role to affect the positive impact on the economic prosperity of business as well as individuals in the region of the Games (Sustainability Report, 10).
Local Design Work

Specifically, with regards to the Olympic villages, local architects and building practices were to be utilized. The intent of this decision was to showcase the local talent and expertise present in the region, with hope the opportunity to showcase this talent resulted in more international business for local firms. Thus, leaving an economic legacy from the Games (Bid Book V2, 197).

Richmond Trade and Exhibition Centre (RTEC)

The RTEC was intended to function as a nucleus for economic and community development for the community of Richmond, bringing traffic through the area in the form of tourism, education, recreation, and business (Bid Book V3, 117).

Environmental Legacies

Green Buildings Targeting LEED Standards

In the Bid Document, the Bid corporation detailed the intent of themselves and VANOC to utilize designs and techniques, which when constructed are deemed ‘Green Buildings’ to showcase the best of green building. The standards met were LEED and consist of five categories: sustainable site selection, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality (Bid Book V1, 57). This environmental legacy directly correlates with the success of many of the hard infrastructure projects constructed by VANOC. Through VANOC and the municipal governments’ intent to utilize the Games as a mechanism to achieve urban renewal projects in the region, the environment, sustainable operations, and appropriate community usage post-Games were highlighted through the design and construction phase.
Air Quality and Greenhouse Gas Emissions

At the time of the Bid, Vancouver was considered to have the lowest pollution rate and best air quality in North America amongst other major metropolises. In an attempt to maintain this praise and improve air quality, the Vancouver Bid Corporation outlined methods to reduce emissions and set emissions targets to achieve throughout the construction phase and carrying out the Games (Bid Book V1, 57).

Natural and Cultural Heritage

British Columbia is a landscape as diverse and natural as any landscape in the world, projecting beauty onto whatever sits atop its land. The levels of government were influential towards VANOC maintaining the natural beauty of the land; in turn, VANOC took specific care in selecting locations for the Games venues to ensure the land was respected and maintained. In addition to the beauty and environmental care of the land, BC is home to many First Nations cultures who also have heritage tied to the lands; this heritage was respected during the venue site selection process (Bid Book V1, 57).

Environmental Studies

With regards to venue construction and land usage, environmental assessments were carried out for each venue. However, the environmental studies on the Athletes’ Villages were the ones highlighted extensively in the Bid Book. These facilities were highlighted extensively because of the municipal governments interest and involvement in the projects. The projects were cornerstone pieces, providing legacies to the region in terms of housing post-Games, and leading towards Vancouver’s model sustainable community initiative for False Creek. The Environmental assessment of the site for the Vancouver Village found the project would result in less impact than the former
industrial property on the environment. The Whistler Village project utilized field surveys and further studies to determine the potential environmental impact, the extent of the impact and meant to manage the impact of the project, including new sustainable energy, water, and habitat conservation strategies (Bid Book V2, 213).

**British Columbia Waste Management Act**

To further the importance of environmental sustainability throughout the planning for these Games, the Bid Corporation and VANOC ensured the infrastructure constructed for these Games, aligned with the British Columbia Waste Management Act and other provincial and municipal legislation related to environmental regulations. The route chosen to ensure the infrastructures alignment with regulations and policies was abiding by further environmental studies on all infrastructure receiving public funding. Wherever possible, the sites with the least amount of environmental impact were chosen for projects (Bid Book V2, 137).

**Public Transportation & Park and Ride Spaces**

As mentioned above, VANOC was striving to achieve a net zero emissions Games, through many routes including construction techniques and design of infrastructure. Another source was limiting and deterring the source of emissions in other ways to offset the production of emissions from unavoidable sources. One example of limited and deterred emissions was through the transportation plan of VANOC limiting the usage of vehicles during the Games period (Sustainability Report, 38). Implementing main parking areas, stimulating the practice of carpooling and using mass transportation systems instead of having available parking at and surrounding venues was a strategy
utilized by VANOC to lower the emissions produced by transportation (Bid Book V3, 69).

*Sustainable Transportation Guidelines*

Another example of VANOC’s attempt to offset the Carbon footprint of the Games was through sustainable transportation guidelines including an anti-idling policy for automobiles, a smart driver program, vehicle maintenance programs, and route planning procedures (Sustainability Report, 9). Coca-Cola was a sponsor of the Games and the Olympic Torch Relay, which leveraged these events as an opportunity to minimize the carbon footprint through these planning initiatives and reduce the emissions from the event as a result (Sustainability Report, 111).

*Consultation and Collaboration*

Throughout the Bid Book and VANOC final documents, the practices of consulting and collaborating between stakeholders was at the forefront. Stakeholders including levels of government, organizations, First Nations groups, IFs, and the public were all able to voice their opinions and needs relative to certain projects, or initiatives for long- and short-term gains. VANOC utilized consultation and collaboration as a means to engage multiple groups to achieve the best possible outcome from the investment required to host the Games. Specific to environmental legacies, VANOC created an environmental working group with representation from all levels of government, non-governmental organizations, academia, and industry specialists (Bid Report, 9).
International Gold Standard Projects

In a more international approach to offset carbon emissions, and expand the reach to achieve a global legacy of the 2010 Vancouver Winter Games, the 2010 Carbon Legacy Portfolio sourced five environmental sustainability projects around the globe including: a wind farm in New Zealand, distribution of efficient and clean-burning cook stoves in Uganda, a run-of-river hydro project in China, a biogas power generation project in India, and a wind farm in Turkey (Sustainability Report, 46).

Sport Legacy Projects

2010 Legacies Now Society

This society, as stated in the Bid Book, was to be focused on sport development and endeavors which created a lasting legacy during the Bid and organizing phases of the Games. Its primary focus was to instill Olympism in youth by encouraging all to support and contribute to the bid; as well, support and develop athletes so they can be, and compete against, the best (Bid Book V3, 115). Focusing on sport development and encouraging all to support the bid, the hope was to foster the spirit of Olympism in all by integrating the athletes and the general community in sport facilities. The provincial government committed $3 million throughout the province of BC during the planning and organizing stages of the Games to increase the participation levels in sport across the province (Bid Book V1, 19).

2010 Legacies Now

VANOC’s response to the Bid Corporations acknowledgement of the 2010 Legacies Now Society, was the organization 2010 Legacies Now. The organization is a
third-party group, with the objective to ensure social legacies are created and maintained post-Games to work towards change and innovation within society.

*Whistler 2010 Sport Legacies*

Similar to 2010 Legacies Now, the Whistler 2010 Sport Legacies organization is responsible for operating the Games legacy venues in Whistler with the objective to advance high performance sport development and recreational participation. The goal of the organization was to achieve these objectives while also attempting to advance the economic, environmental, and social sustainability of the venues.

*Physical Fitness and Amateur Sport Fund*

This fund was created by the provincial government of BC as a means to stimulate the participation in sport across the province. This is one example of the support and importance the province placed on legacies and receiving something meaningful from the Games. The Physical Fitness and Amateur Sport Fund totaled $14.2 million from the provincial government, and was an example to strengthen the scope of the 2010 Legacies Now Society (Bid Book V1, 19).

*Legacy Endowment Fund*

The $71 million Legacy endowment fund was created by the governments of Canada and BC “to ensure a living legacy of the Vancouver 2010 Olympic and Paralympic Winter Games, for both sport and the community” (Bid Book V1, 73), by providing more people the opportunity to use these facilities and garner interest, as well as skill development in sports. In the Bid Book it was stated that the SFU Speed Skating Oval, the Whistler Sliding Centre, and the Whistler Nordic Centre would be the
recipients of the fund, where as stated in early components of this paper, the Richmond Oval was a recipient instead of the SFU Speed Skating oval.

Games Operating Trust

In response to the Bid Corporation, VANOC and the levels of government initiated the Games Operating Trust, a $110 million fund to support the ongoing operating and capital maintenance costs to aid the organizations taking over ownership of the venues (Knowledge Report, 53; Sustainability Report, 96).

Legacy Plan for Games Surplus

In the Bid Book, the importance of having a plan to deal with the Games surplus was highlighted and ranked as important with regards to abiding by the Host City Contract. Specifically, the surplus plan was aligned with the Host City Contract requirement of using a portion of the surplus to enhance the general benefit of sport in Canada. These are requirements because of the monetary support provided by the federal and provincial governments (Bid Book V1, 39).

Participation in Games

In an effort to make the Games more accessible for everyone to benefit and participate in the Games, the Bid Corporation publicized their intent to provide opportunities to people of many demographics through inner-city non-profit organizations. VANOC was to make 50,000 sports event tickets, passes to the medal ceremonies and opening and closing ceremonies to meet this promise (Bid Book V1, 95).

Celebrate 2010 Initiative

The Celebrate 2010 Initiative was VANOC’s response to the initiative set out by the Bid Corporation. To provide accessibility to the Games for all Canadians, 50,000
tickets were dispersed. Of the 50,000 tickets, 24,000 were provided through 65 organizations and 6,000 to Aboriginal peoples through approximately 55 organizations (Sustainability Report, 64).

**SFU Oval**

In the Bid Book, the proposed venue for the Speed Skating competitions was the SFU Oval, with a proposed post-Games usage to benefit the Simon Fraser University community. The facility would incorporate technology to enhance the experiences and training capabilities of coaches, trainers, and athletes. The design of the facility was to indulge the spectators and garner further interest in the competition and spectating of the sport through better viewing areas. Finally, the facility post-Games would further the development of both summer and winter sport and recreation opportunities to SFU and the community; the BC Skating Association and Speedskating Canada planned to utilize this centre as a ‘centre of excellence’, with the hope of keeping the sport popular, and the venue in use (Bid Book V2, 63; 67).

**Richmond Olympic Oval**

VANOC’s response to the proposed SFU Oval was the construction of the Richmond Olympic Oval. Post-Games, as discussed in previous sections, the Oval was repurposed into a multi-sport and wellness facility; also acting as a venue for training and hosting competitions, including para-sports. Although the SFU Oval was planned to be the venue of choice, there were cost related reasons limiting that venue. As mentioned in the (2003) episode ‘Vancouver’s Olympic Bid Book’ from the CBC television program Canada Now, the Bid book was strictly a plan and things can change; the fact that VANOC altered the plan was not a means to trick the IOC, but rather find and provide an
alternative they believed would benefit the Games, and be more feasible to them, while also attempting to control the outcomes the venue had on the community in a positive manner.

**Whistler Athletes’ Centre**

In the Bid Book, the Bid corporation briefly addressed the Whistler Athletes’ Centre, vaguely outlining the planned legacy of the facility post-Games. The Bid Corporation highlighted the intent of the Athletes’ Centre to increase sport development at the entry and high performance levels by providing athletes training and competition sites; and space to integrate athletes of many levels with the community. The services provided to accomplish these goals intended during the bid phase were affordable training and accommodation during and after the 2010 Games, as well as office spaces (Bid Book V2, 7). VANOC responded with a permanent Athletes’ Centre in Whistler as a way of providing the affordable accommodation, training and development site. They also incorporated community fitness and wellness usage to integrate the community into the facility as well (Sustainability Report, 120).

**Multi-Facet Facilities**

Through the analysis of venues post-Games, and the ways the venues were adapted for legacy usage, it is evident that there was a clear initiative to design and develop facilities that could serve multiple purposes. The ability for venues to accommodate multiple sports provides more output for the investment and highlights the efficient use of funding from planning. Examples of this include the Richmond Olympic Oval and Cypress Mountain, the latter was utilized for mogul run and big air events
during the Games, and now benefits the Freestyle Ski Club, the Olympic Villages, and community centres which acted as training venues during the Games.

**Sport Channel**

Although minimally mentioned in the Bid Book, the legacy of Sport Channel was to increase the interest and the relationship between youth and sport. The program was a national sport evaluation and information resource to improve the sport development experiences of youth at the local level (Bid Book V3, 125). The program was not mentioned by VANOC; therefore, it is unknown to what extent they truly valued this commitment. Further research is necessary on this topic to make a valuable determination on the outcome of this attempted legacy.

**Aboriginal Youth Sport Legacy Fund**

The Aboriginal Youth Sport legacy fund was introduced in the final documents by VANOC as an initiative to support the development of Aboriginal youth sport and culture. The fund was to improve these experiences through projects with the purpose of increasing knowledge and awareness of the Aboriginal culture, with the advancements and impacts Aboriginals had on Canadian life. The fund originated as a $3 million government funded procurement (Knowledge Report, 44; 58). In addition to the original government sum, the financing was also produced from the sales of Aboriginal products (Sustainability Report, 11; 97).

**2010 Indigenous Youth Gathering**

Another legacy VANOC outlined in their final documents was the hosting of the 2010 Indigenous Youth Gathering (2010 IYG) during the Olympic Games (Sustainability Report, 79). VANOC and the FHFN hosted the gathering to develop leadership, celebrate
aboriginal culture, and honour participants by including them in the Opening ceremonies for the Olympic Games. Participation in the 2010 IYG involved 300 Aboriginal youth from across Canada, and the events included workshops in activities relative to the pillars of the Olympic Movement (Knowledge Report, 59). These workshops provided the opportunity to forge an identity between the IOC and Aboriginal sport and culture. These opportunities are important for creating relationships to identify areas of similarity, and potential areas for change and improvement to strive to complete accessibility for all with regards to legacies of the Olympic Games.

**Information and Education Legacy Projects**

*Public Information, Education and Awareness Programs*

A large component of the Vancouver-Whistler Olympic Bid was environmental sustainability and improvements relative to environmental design. One approach taken by the Bid Corporation to further the reach of environmental sustainability was implementing and providing extensive public information, education and awareness programs. The programs incorporated environmental sustainability themes, designed to target schools, athletes, tourists, sponsors, suppliers, and the media throughout the life of VANOC. (Bid Book V1, 57).

*Games Time Activities*

VANOC continued the trend of public information, education, and awareness with activities and marketing programs during the Games. VANOC was hopeful that through signage, experiences, education, training tools, and programs they could influence society and guide them to be more environmentally, socially, and economically sustainable post-Games (Sustainability Report, 12; 35).
**Sustainability Education and Skills Training**

Similarly, to Public Information, Education and Awareness Programs listed above, the Bid Corporation and VANOC created an education and skills training program specific for their own employees. Those involved with VANOC will receive sustainability education and skills training for the betterment of the community and workplaces (Bid Book V1, 57). From the early stages of the bid process through the lifetime of VANOC, a sustainability management system was developed to support balanced decision making, a long-term view, inclusiveness, equity and healthy communities. The system was maintained through organizational policy and commitment, education and awareness, monitoring and reporting, and their own environmental, social, and economic actions (Bid Book V1, 55).

**Sustainability Star Program**

The Sustainability Star Program was developed by VANOC to award its suppliers for their measurable positive impacts in advancing economic, social, and environmental sustainability. For many partners and sponsors, the program aided their ability to refine sustainability practices into their everyday businesses. For VANOC, it provided an opportunity to inform and educate their suppliers on the importance of sustainability. The Winter Olympic Games provides a platform to advocate for sustainability practices to have a positive impact on a region, and the sustainability Star program was a way to exploit and leverage this platform provided by the Games; this is evident in a quote by Michael Vance, the general manager of policy and program development for the RMOW, and a sustainability star jury member: “It’s extraordinary, the initiatives that we’re seeing.
What surprises me is the breadth of engagement in sustainability initiatives-all sparked by the Games (Sustainability Report, 109)."

*Sustainability Journey*

Another resource VANOC used to leverage the Games to inform stakeholders was the Sustainability Journey program. The program was an animated multi-lingual video explaining sustainability in a Games context (Sustainability Report, 95). The innovative communications tool provided an outlet to better educate the public and VANOC affiliates, on the means of sustainability relative to the Games.

*Centre for Sport and Sustainability at UBC*

The Vancouver-Whistler Bid Corporation along with VANOC, emphasized the importance have having sustainable and long-term use facilities after the Games occurred. Facilities that could benefit the communities in which they were located, and provide programs leading up to the Games to garner interest and draw attention from sponsors to improve accessibility to the Games. The Centre for Sport and Sustainability at UBC was a program and piece of infrastructure instilled by VANOC to benefit UBC and their Human Kinetics program. The lead researchers conducting the Olympic Games Impact report (OGI) were located at UBC, and this relationship was instrumental to obtain this centre at UBC (Sustainability Report, 95). The centre for sport and sustainability sprouted from the original framework from the Bid Corporation to heavily incorporate the local universities in the duties of hosting the Winter Olympics. UBC was intended to, and did, receive upgrades to their hockey arena. The original sustainability and sport centre was primarily focused towards aiding the Canadian Hockey Association and Hockey British Columbia with their programs; providing the university and local
community with recreation and entertainment opportunities; and research taking a secondary role (Bid Book V2, 53).

**Skill Development Programs**

Throughout the Bid Book there was emphasis on making the Games accessible and beneficial for all. The Bid Corporation spoke about enabling suppliers and contractors in an effort to provide skill development opportunities in construction jobs to disadvantaged individuals within the community.

**RONA Vancouver 2010 Fabrication Shop**

VANOC followed the Bid Corporation’s intent to develop the skills of disadvantaged persons within the community by developing the RONA Vancouver 2010 Fabrication Shop. The program was developed to train and employ individuals from the community. All products built in the Fabrication Shop were purchased by VANOC for use in the Games venues. The shop remained open post-Games as a supplier to other wholesalers (Sustainability Report, 67).

**Just Beginnings Flowers**

Another example of skill developing employment opportunities included Just Beginnings Flowers; a social enterprise that focused on floral design training. The program specialized in providing workplace experience to people facing barriers to join the workforce including single parents, women who experienced violence, and persons returning from prison or alcohol and drug abuse (Sustainability Report, 68).

**Transportation Public Information Campaign**

The Bid Corporation instilled an ideology to host a carbon neutral Games, developing infrastructure to align the province of BC with their goal of being fully
sustainable by 2020. This resulted in more public transportation, a travel plan which
strived for shared personal automobile usage, such as carpooling or minimizing personal
automobiles. In order to provide a more festive and celebratory atmosphere around
Games venues, there were more road closures as well. A public information campaign
was launched to provide adequate notice to residents and communities of these changes
in advance to make them aware of route changes. The primary goal was to notify
residents of changes, the secondary goal of the campaign was to notify, identify, and
influence these people of the alternative means of transportation able to be utilized in
their daily commutes (Bid Book V3, 81). These closures and changes are an example of
displacement and may be seen as a limitation to residents, going against the definition of
urban renewal, by decreasing the functionality of the city. However, through VANOC’s
efforts to educate and provide alternative methods of transportation, the displacement of
residents and limitations of functionality, relative to transportation throughout the city,
may not have been as drastic as could have been anticipated when hosting a mega-event
such as the Winter Olympics.

TravelSmart

The TravelSmart program was a campaign created by VANOC to encourage
carpooling and using public transit, walking or biking, and tele-working as an effort to
minimize traffic and carbon emissions during the Games period. A large component of
this campaign and making this strategy successful was the inclusion of free public transit
for all Games accredited personnel, and ticket holders (Sustainability Report, 63). The
campaign had its own website, accessible to all, to better inform people in the region of
transportation options (Sustainability Report, 71).
International Image Campaign

The Bid Corporation addressed their plan to educate the world about Vancouver and Canadian culture in the Bid Book. The Bid Corporation and VANOC relied on Vancouver’s international destination tourism prestige, and well-known Canadian personalities to ignite interest in Vancouver. The campaign was spread by the media, and through public relations activities in integral geographic markets. The campaign was to focus on reinforcing the interest in Olympism, sports of the Winter Olympics, and Vancouver separate from the Olympics (Bid Book V3, 115).

Olympism Education Portal

Inspired by Pierre de Coubertin, the idea of Olympism and educating about its ideals has long been an interest of the IOC and a responsibility of Organizing Committees. The Olympism Education Portal was an example of a program created by the Bid Corporation to provide an educational program appropriate for in-school curriculum, and interactive on-line learning. Areas of focus in the portal was to include learning about the Olympic Movement, benefits of athletics, and inspiration of elite sport competition (Bid Book V3, 125).

Vancouver 2010 Education Program

VANOC followed the initiative started by the Bid Corporation in an attempt to engage a new generation of Olympic enthusiasts. The best way VANOC deemed to do so was through delivering a program acceptable for teachers and students at all levels of education (Knowledge Report, 21).
Participation in and Learning Through Sport

The Bid Corporation put an emphasis on youth sport development in the bid document. They stressed the importance of sport and Olympic values; outlining the intent of VANOC to create programs to garner interest and participation in the Games. One of the programs was to put Olympic athletes in schools across Canada to facilitate the interest and participation. The Bid corporation believed that participation would allow first hand exposure and experience with the values of sport and Olympism (Bid Book V3, 125).

Can-Do

Can-Do was a communications network developed by the Bid Corporation and later VANOC. The goal was to foster a connection between the Canadian Olympic Youth Academy organizers with its graduates and the public. The intent was to foster growth of academies nationwide to promote the values of Olympism and facilitate community initiatives (Bid Book V3, 125).

“Do Your Part”

VANOC created a similar initiative to Can-Do, developing “Do your Part” a national sustainability youth video contest providing activation opportunities for interested youth, athletes, sponsors, and the public. These opportunities were developed through video storytelling and social media (Sustainability Report, 12; 13; 21).

World-Youth Link

In an attempt to impact the perception of Olympism worldwide, and benefit the international interest in the Olympics, the Bid Corporation developed the World-Youth Link. A program created with the intent to provide opportunity for youth; the program
allows youth to act as the educators or media. Through the program, youth were encouraged to share their Olympic dreams and stories from their own communities (Bid Book V3, 125).

**Intellectual Muscle: Dialogues for the 21st Olympiad**

Another program, mentioned to be developed in the Bid Book by the Bid Corporation, with the objective to spread interest and knowledge of the Olympics worldwide, Intellectual Muscle, was an international conference series on the themes of Olympism (Bid Book V3, 125).

**Outplacement Program/ Beyond 2010**

VANOC offered workshops focused on post-Games career opportunities for its workforce. The opportunities were provided to paid staff in the means of life transition workshops, financial seminars and training, and career fairs; including featured employers, employment agencies, and further educational opportunities (Sustainability Report, 72; 75). In an attempt to better the culture and skills of their workforce, VANOC provided these training programs to have competent staff at their disposal, and in turn left individuals with better skills for their post-VANOC careers, hoping to minimize an emotional letdown in its workers through their personal transition into new career opportunities (Knowledge Report, 40).

**Public Life, Culture and Politics Legacy Projects**

**Olympic Arts Fund**

In an attempt to strengthen the scope and benefits of hosting the Winter Olympics, the Bid Corporation facilitated support for legacy programs with the federal and
provincial governments. In this case, the provincial government committed $13 million to the Olympic Arts Fund (Bid Book V1, 19).

**Vancouver 2010 Venues’ Aboriginal Art Program**

VANOC developed a program to incorporate culture and public life into the Olympic Villages and sporting venues. Specific to this legacy, VANOC installed contemporary and traditional Aboriginal artwork from the FHFN, First Nations, Inuit and Metis artists located across Canada (Knowledge Report, 79; 82; Sustainability Report, 120).

**Multi-Party Agreement (MPA)**

As discussed earlier in the document, the MPA was signed in November 2002 prior to the host city selection vote. The agreement developed the guidelines to address significant governance issues, including the composition of the Board of Directors and their decision making authority had VANOC won the bid (Bid Book V1, 37). The composition of the MPA with an outline stating the inclusion requirements for the Board of Directors, signified a committed effort to provide power and opinion to many different groups of people throughout Canada and British Columbia. The makeup of individuals incorporated into the Board of Directors allowed for voices of political importance, as well as cultural importance and popular daily life routines for the region.

**Vancouver Agreement**

The Bid Corporation, federal, provincial, and municipal governments adopted inclusive intent and commitment statements to maximize the outcomes of the Games for people from lower socio-economic situations living in Vancouver’s vulnerable inner-city neighbourhoods. The Vancouver agreement outlined numerous goals and objectives to be
fulfilled by the three levels of government and VANOC, had the bid been successful (Bid Book V1, 63).

Bell Vancouver Agreement Donation

VANOC’s intent to provide accessibility and inclusion to all, in addition to motivating sponsors to develop initiatives to make a difference, inspired this donation by Bell. The donation of $1.5 million to the Vancouver Agreement was an act of intended urban renewal; directed towards the economic revitalization of Vancouver’s downtown East side. The donation along with efforts from the federal, provincial, and municipal governments actions was an attempt to rejuvenate the neighbourhood (Sustainability Report, 110).

Callaghan Valley Shared Legacies

The Squamish and Lil’wat First Nations were two of the comprising bands of the FHFN. Also, they were represented in the MPA and due to the tendering process agreed to by VANOC and the Bid Corporation, were part of a shared legacy initiative in the Callaghan Valley. Due to their land and territory being central to the development of new infrastructure for the Games, it was deemed appropriate by the Bid Corporation and stakeholders of the MPA to better incorporate the Squamish and Lil’wat nations into the design phase to acknowledge their communities needs and wants in the development of their land (Bid Book V2, 137).

Shared Legacy Agreement- Squamish and Lil’wat Nations

The first formalized agreement related to the Callaghan Valley was between the Squamish and Lil’wat Nations, the Bid Corporation, and the province of British Columbia in 2002. The pact agreed to multiple legacies provided to the Nations,
including land and money. The resources were to be used for skill and economic
development, housing, recognition programs, and various contracting opportunities for
the 2010 Winter Games. Three major objectives agreed to for the duration of the planning
and organizing phase were the need to respect the Nations’ historic and current presence
in the region; protect the Nations’ rights; and take advantage of economic opportunities
presented from hosting the Games (Bid Report, 12; Knowledge Report, 59).

**Memorandum of Understanding and Respecting a Cooperative Working Relationship**

The second formalized agreement, and the lesser discussed throughout the
documents utilized in this study, the memorandum, was an agreement between the Tsleil-
Waututh and Musqueam Nations. The agreement was signed 1 July 2003, the day before
Vancouver won the right to host the 2010 Winter Olympics. The signing of this
memoranda ensured the Bid Corporation, and in turn VANOC if successfully awarded
the bid, would have prominent working legislation with each of the Nations identified as
the FHFN; this agreement ensured a commitment to provide legacies and benefits to each
of these Nations from the Games (Bid Report, 12).

**Whistler Olympic Village**

As discussed in prior sections, the Whistler Olympic Village was a legacy to the
community of Whistler as a piece of infrastructure built for the purpose of the Games.
The real-estate development post-Games served as non-market housing for Whistler
employees and housing for future athletes training in Whistler. Furthermore, the design
and construction of the village incorporates the natural landscape of the territory, and the
heritage and culture of the Nations which have resided in the region historically. As well,
parts of the Athletes’ Village were deconstructed for relocation under the plan from the
Bid Corporation, and has provided benefit to First Nations communities across the province of BC (Bid Book V2, 195).

**Security Technology**

Although Security Technology could have been perceived as infrastructure, or education and knowledge, due to the development of soft infrastructure from experience, knowledge and skills gained within workers, or the implementation of software properties to other infrastructure, the security attacks avoided benefit the public, and resulted in political gain. The Bid Corporation highlighted the importance of taking necessary precautions to ensure communications networks were protected from cyber-attacks. Previously mentioned under hard infrastructure, the ECOMM centre was the home of the ICC, allowing for better communication and ability to respond to emergencies more efficiently. This efficiency and preparedness allowed better coordination to protect against all risks, and in this example technological risks (Bid Book V3, 43). Due to the increased experience, infrastructure, and skills resulting from ECOMM and the technology security precautions initiated during the Games, citizens, software, and the infrastructure being invested in were made more stable, reliable, and better protected in the future.

**Community Consultation**

In an attempt to generate public interest, while also developing a bid with the intent of providing accessibility for all, the Bid Corporation held over 1,000 presentations and open houses. Their efforts also comprised consulting with many stakeholders including the general public and groups on issues of interest and concern. The issues of social inclusion, environmental impacts, social and physical accessibility were all met on
and discussed. These efforts were intended to provide the Bid Corporation and later VANOC a vast array of opinion and information to provide legacies and benefits to communities and populations who would not have typically benefitted from hosting a mega-sporting event (Bid Book V3, 115; Sustainability Report, 137). This emphasis of planning, information seeking, and integration of a large variety of niche support groups is what exemplified the use of CPT and Social Choice Theory amongst and within the Bid Corporation and VANOC.

**Olympiad Cultural Program 2006-2010**

In the Bid Book, the Bid Corporation introduced the Olympiad Cultural Program. The responsibilities of VANOC were to facilitate a wide array of cultural programs including educational, festivals, and conferences celebrating the history and accomplishments of Canada’s communities. In addition to Canadian talent, other IOC nations were included to showcase their cultures in an effort to create lasting friendships (Bid Book V3, 125).

**Cultural Olympiad**

VANOC in a response to the Cultural Program 2006-2010 created the Cultural Olympiad which occurred yearly, to introduce Canada and the Olympic family to the diversity of culture and art in Canada (Sustainability Report, 5). The event started in 2008 and grew larger, incorporating more cities and organizations, by the time the Games were hosted (Sustainability Report, 66). As well, the Cultural Olympiad contained a digital edition (CODE), which partnered with some organizations to enhance engagement with the community through public spaces (Sustainability Report, 95). The inclusion of online material through CODE allowed accessibility from anywhere in Canada and the
World. Related organizations such as the IOC, other NOCs, and IFs were able to redirect interested constituents from their populations to the products. The United Nations utilized material created from CODE and the cultural Olympiad, to better promote peace (Sustainability Report, 99). The ability for a program to spread and impact many organizations and people, from a diverse background of interests emulates the power this program had. In turn this example of legacy distinctly highlighted the power and scope the Games can have with regards to political presence around the world.

**Olympic Torch Relay**

Originally the Bid Corporation made reference to this legacy as the Olympic Flame Relay, referencing the general transport of the Olympic Flame from Olympia, Greece to Vancouver (Bid Book V3, 127). The Torch Relay was instrumental in garnering interest and anticipation amongst Canada’s population. According to VANOC, the route travelled was over 45,000km, visiting over 1000 communities, utilizing over 100 modes of transportation; this was organized as such to integrate the greatest number of communities and celebrate the many forms of movement utilized in a diverse nation through its history (Knowledge Report, 13; 14). Incorporated into the Torch Relay was the Coca-Cola’s Sogo Active initiative which awarded 1000 torchbearers spots to teenagers across Canada who showed obligation to active lifestyles (Sustainability Report, 111). The Torch Relay for the 2010 Winter Games celebrated many firsts; including being the first carbon neutral Torch Relay, thanks in part to the efforts of Coca-Cola and RBC (Sustainability Report, 42). The other celebrated first was the inclusion of Aboriginal participation in the relay acting as honourary members, torchbearers and flame attendants (Sustainability Report, 82). Finally, the torch itself was a cultural legacy,
the innovative design capitalized on recycling, with each torch manufactured consisting of 90% recycled material. The design of the torch was completed in Canada by local designers, and built in Canada as well (Sustainability Report, 136). In conclusion, the Torch Relay was a communications tool intended to unite, excite, educate, and entertain the nation leading up to the Games. It celebrated Canada’s history and diversity, allowing isolated communities all over the nation to enjoy the Games. This inclusion was intended to fully provide a celebratory atmosphere leading up to ‘Canada’s Games.’

**Olympic Arts Festival**

Mentioned by the Bid Corporation in the Bid Book, the Olympic Arts Festival was to “open a five-week Celebration of the Olympic Movement.” The festival began 15 January 2010 and took place in 25 existing venues in Vancouver and Whistler to showcase the art and culture of Canada and international nations together. Throughout the Games, the intent was to have the celebration from the festivals spill into the streets and public spaces of Vancouver and Whistler to celebrate diversity and accomplishment in sport and art (Bid Book V3, 127). If done successfully, this festival had the potential to generate significant, and lasting respect throughout the Games region. The timing of the festival in unison with the Games had the potential to attract many different interests to the region. Wholly, this was a cultural and public legacy, paying tribute to distinctly different and sometimes conflicting interests in Canada, arts and sport.

**Celebration Sites**

As conducted by VANOC, celebration sites did occur throughout the Games. The inclusion of celebration sites was deemed important by the IOC and VANOC as discussed earlier in this paper with regards to the Whistler Medals Plaza. The Plaza was
integral to the atmosphere for both athletes and spectators in Whistler, and in various locations across Vancouver (Bid Report, 52). Street closures and the creation of ‘public space’ was responsible for some of the most lasting images from the Games; the huge crowds celebrating the outcomes from sport competition (Knowledge Report, 29).

Although it isn’t available to be observed post-Games like other forms of infrastructure, the sites provided an area for diverse groups of people to come together to celebrate and become united for multiple causes. These are the lasting memories people will have of their Games experience, with socialization, public celebration, and unitedness.

**Olympic National Team Artists**

The Bid Corporation introduced the culture program, Olympic National Team Artists, which went ignored by VANOC in their final documents. The Bid Corporation highlighted the intent that encouraged VANOC to motivate each NOC to include an artist in its team mission. The artist’s goal was to capture and reflect on the participation of their respective NOC (Bid Book V3, 127). History has long been recorded by artists through many forms of art. The Bid Corporation attempted to merge the arts and sport, allowing the Games to provide art a platform to remain and gain a larger audience.

**Olympic Museum Exhibition**

In an attempt to have a greater impact on culture in the hosting region, the Bid Corporation extended the duties of VANOC in the Bid Book. Beyond the expected exhibition at the Olympic Museum in Lausanne, Switzerland, VANOC was expected to host an exhibit from Lausanne at the Vancouver Museum (Bid Book V3, 127).
Youth Camp

Another legacy of the Games established by the Bid Corporation and intended to be carried out by VANOC was a Youth Camp. The camp was operated from 4-21 February 2010 with invitations to 440 youth delegates, including two from each NOC and Canadian province, and a host from each region of British Columbia. Delegates were encouraged to share their experiences and knowledge with their home communities during and after the Games. The cost of the camp was partially paid for by VANOC, with bursaries available to increase the participation of all NOCs. Youth delegates were educated and integrated with one another through web-based programs to educate them on Olympism and Canada. Their relationships with one another were fostered through group projects and final planning leading up to their participation in Youth Camp. The camp included workshops and seminars on themes significant to the Olympics; as well, the delegates were able to attend the Opening ceremonies, and other events, explore British Columbia and experience winter activities, while also learning about the diverse cultures present in the region (Bid Book V3, 129).

Mascots

VANOC, like every other organizing committee of Winter Games since 1968 developed mascots for the Games (International Olympic Committee, 2017). VANOC was the first organizing committee to introduce the Olympic and Paralympic Mascots at the same time. Olympic mascots, Miga and Quatchi, and Paralympic mascot, Sumi were introduced alongside Olympic sidekick, Mukmuk on 27 November 2007. The mascots had to “appeal to small children from all over the world; represent the people, geography
and spirit of BC and Canada; and personify the values of the 2010 Winter Games (Knowledge Report, 11).”

The Mascots were well received by the public and even had a following. The mascots made 1500 appearances leading up to and during the Games. In the first six months following their introduction to the world, they made 136 appearances. Also, over the same six-month time period, the mascot webpage received over 1.8 million page visits (Knowledge Report, 11; Sustainability Report, 138).

**Opening and Closing Ceremonies**

At the time of the bid, the Bid Corporation was primarily interested in the location of the opening and closing ceremonies. The selection of BC Place provided the first time the celebration would be held indoors; this selection provided the opportunity to utilize a 360-degree image projection system. The system used in unison with other production equipment from the host broadcaster allowed television viewers to feel as involved as the people live at the event. To further the accessibility of the Games, tickets were to be made available through non-profit organizations for inner-city residents to participate (Bid Book V3, 127). VANOC followed through with this initiative with the Celebrate 2010 campaign. Of the 50,000 tickets distributed, 30% were for Opening and Closing Ceremony participation (Sustainability Report, 64).

VANOC considered it important to please the Canadian audience, as they were deemed the most vital audience. By engaging the domestic audience, support for the Games would be more likely to flourish (Knowledge Report, 15). The incorporation of the FHFN into the Opening Ceremonies included responsibilities of welcoming the world to sacred land, as well as celebration and cultural performances (Knowledge Report, 16).
Similarly, in the Closing Ceremonies volunteers were recognized for their hard work and tireless devotion to the Games. This recognition bodes well for the culture of support and help Canadians have with sport.

**Accessible Games**

The Bid Corporation created a vision and importance throughout their operations and Bid Book to institute accessibility into all aspects of the 2010 Games. Through the creation of the MPA, and endorsing the validity of concerns brought forward by various organizations and citizens in the community, VANOC was able to adapt and create programs to better the impact of the Games. VANOC addressed the 2010 Winter Games Inner-City Inclusivity Commitment Statement, incorporating many themes, initiatives, and programs into the Games’ planning. The willingness of VANOC to create opportunities for all to attend events and participate in the Games; enjoy economic opportunity; create barrier-free venues for spectators and participants post-Games; skill development for sport, education, and economic gain; affordable housing; and better social and health services (Knowledge Report, 65; 66).

**Ray-Cam Co-operative Centre Sport Court**

A cultural and public life legacy of the Games, in large part due to the information education programs of VANOC to garner interest and support from sponsors to create legacies from the 2010 Winter Games. The Ray-Cam Co-operative Centre Sport Court, is a post-Games legacy, created after the Games. It is a project made possible, due to Coca-Cola’s environmental, sport development, and cultural sustainability efforts. The sport court was built from material purchased with the deposit value from plastic bottles.
recycled during the Games. This project benefits the community, and provides a place for individuals to gather and participate in sport (Sustainability Report, 56).

**Coca-Cola Mittens and Scarves**

Similarly, to the sport court, Coca-Cola utilized the recycled bottles from the Games to benefit the Coca-Cola Mittens and Scarves legacy. The recycled material from the bottles was manufactured into tuques and scarves. The apparel was then distributed to social service community groups in Vancouver’s inner-city (Sustainability Report, 56). The mittens and scarves campaign was a tangible memory of the Games in the community for many people, and contributed to a cultural fashion craze post-Games. This campaign also provided meaningful and useful resources to people in need of assistance to handle the climate of a Canadian Winter.

**2010 Aboriginal Pavilion**

Although this legacy was a piece of infrastructure constructed for the Games, it was not analyzed as thoroughly as the other pieces of infrastructure. This decision is because of the purpose of the facility. The Aboriginal Pavilion was deemed necessary to provide opportunity for economic advancements and to showcase the culture of the FHFN in Canada (Sustainability Report, 80; 82). The structure does still stand, however, in a new location (Larigakis Architecture, n.d.). The 2010 Aboriginal Pavilion was open during the Games period and at that time catered to 215,000 visitors, 290 media members and 232 performances (Knowledge Report, 59). The cultural component of the Aboriginal Pavilion provided visitors with storytelling and performances, ranging from contemporary to traditional; included was a show created exclusively for the Pavilion to be aired on its domed roof (Sustainability Report, 82). The economic development was
sourced from an Aboriginal Artisan Village and Business Showcase, located nearby the Pavilion. The showcase celebrated and promoted Aboriginal talent from across Canada in an effort to engage the general public local business community, in an attempt to stimulate networking between general and Aboriginal business (Sustainability Report, 80). The 2010 Aboriginal Pavilion still provides a place for Aboriginal culture to be displayed and celebrated. However, during the Games it provided an opportunity to celebrate and inform about Aboriginal culture to the world.
CHAPTER 5
DISCUSSION & CONCLUSION

Throughout the research, it was evident that VANOC was actively seeking ways to produce the best Olympic Games with respect to venues, culture, and environmental sustainability. Furthermore, an important component to the future of Bid Management, the Bid Corporation and VANOC were formally introducing an attempt to plan legacies into their Bid Document and Olympic Games. As highlighted by Girginov and Hills (2009), the 2012 London Games was the first time, legacy planning was incorporated from the outset of the Bid formation to the fruition of the Games. This is because the Vancouver-Whistler Bid Corporation was the first to implement it in their Bid process, presenting their motives to the IOC Commissions, compelling the IOC to make this a mandatory component of the Bid Document for all future bids. These efforts raise the awareness of different stages relative to bidding, organizing, hosting, and moving on from hosting the Games; and what is considered planning due diligence by Bid Corporations and Organizing Committees in these phases.

Djaballah et al. (2015) view three phases of hosting an event including Scanning, Interpretation, and an Action Phase. In addition, they conclude that although the plan is important to achieve social impacts, the most important segment is the action phase and how the plan is implemented; with teamwork and unity between stakeholders, seen in this phase, which correlates into the successful hosting of an event leading to positive social impacts for the community. This thought is somewhat contradicted by the conclusions of Holger Preuss (2007) and Gratton and Preuss (2010) as they deem consistency as important; utilizing a consistent plan to better strategize legacy to gain success for the
community long-term. As evident throughout the paper, there are differences in terms of planning by the Bid Corporation in the Pre-Event: Candidature Process versus what was constructed or implemented by VANOC during the Pre-Event Construction and Organization phase. Both are definitively important in the success of the community and unlike what is perceived by Djaballah et al. (2015), without the meticulous planning efforts of the Bid Corporation, the Bid potentially would not have been successful; many legacies might have not been developed; arms-length stakeholder organizations would not have had the guidance necessary to implement legacies of their own; and the organizational culture of teamwork and effort necessary in the so-called action phase might have not come to fruition.

**Importance of Results Related to Urban Planning and Urban Renewal**

*Primary Hard Infrastructure and its Impact on Urban Planning and Renewal*

Although the cost of constructing and renovating infrastructure to host mega-sporting events is always one of the first reasons against efforts to host, Trevor Mules and Bill Faulkner (1996) conclude that economic legacies are typically not what municipalities strive for in these projects. Instead, the social aspect of accessibility and sport development in addition to tourism development are the avenues taken to achieve Urban Regeneration; which in theory is similar to urban renewal. However, the difference between them being urban regeneration is more specific to one piece of infrastructure where urban renewal is specific to the community or region. Therefore, urban regeneration is a step towards achieving urban renewal.

In terms of the Vancouver Games, the overall budget of hosting the Games was higher than anticipated and this has a direct correlation to the cost of building and
renovating the Primary Hard Infrastructure; however, there are reasons to justify the increases. The market crash of 2008, inflated the costs of building materials and construction crews; adaptations were made to initial plans including the withdrawal of the SFU Oval and replacing it with the Richmond Oval. The Richmond Oval benefitted from increased funding from government, as VANOC neglected to incorporate SFU funding with their development. Although the economic impact from the switch may have been greater causing more strain on the taxpayers, the difference between the urban regeneration of the two projects resulted in the urban renewal of Richmond as a result of receiving the benefits of a new facility which was transformed as a hub for recreational sport in the community, instead of the already solidified neighbourhood in which SFU resides.

Further examples of Urban Renewal through impacts of Urban Regeneration through accessibility, tourism and sport development include the Whistler Sliding Centre and Whistler Olympic Park, which will benefit from the tourism industry in its success, but also advance the tourism and sport development characteristics of Whistler by drawing high performance athletes, coaches and spectators to the area. The improvements to the Killarney, Britannia, and Trout Lake Community Centres advance the accessibility to sport, culture, and sport development opportunities of all citizens that live in the neighbourhoods of these communities by providing a modernized environment with capabilities to provide up to date services and higher quality equipment for its users. Other sources of maintaining quality of life in the region included advancements to Cypress Mountain and Whistler Creekside; both skiing and snowboarding venues are capable to continue to host recreational and tourism sport as well as high performance
sport into the future, remaining a top destination in North America. Furthermore, the facility improvements to the Pacific Coliseum and Rogers Arena allowed for the continued success in being home to both CHL and NHL teams in the city. These facilities were in dire need of improvements. If not realized, the facilities themselves would have been demolished and replaced; therefore, the renovations conducted on each facility was instrumental in lengthening the facilities’ lifetime. There is much demand amongst cities to host teams that demand outweighs supply, leaving cities outbidding each other for the right to host teams. This leaves professional sport organizations in a position of leverage and able to hold demands over municipalities for public funding towards new stadia (Baade, 1996; Rappaport and Wilkerson, 2001), it was only a matter of time before the Vancouver Canucks and Vancouver Giants franchises threatened to relocate unless new arenas were provided.

Rappaport and Wilkerson (2001) conclude that although it is not economically worthwhile to invest public money into hosting major league sport teams, it can affect the social aspects and quality of life in the city. In terms of this expected investment to retain these franchises, Vancouver was smart to utilize the Games to improve these facilities and include financing aid from provincial and federal levels of government in their efforts to improve their city. Similarly, the privately owned Cypress Mountain was able to benefit from taxpayers dollars to improve the quality of life of residents in Vancouver not wishing to travel to Whistler to experience skiing or snowboarding. Although the Vancouver Games BC Place was deemed secondary infrastructure, its purpose in actuality was a primary hard infrastructure as home to a major league team; it in turn
benefited from improvements to lengthen its lifespan and provide first class accommodation to that team.

**Secondary Hard Infrastructure and its Impact on Urban Planning and Renewal**

With respect to the Secondary Hard Infrastructure utilized for the Vancouver 2010 Games, the Bid Corporation had the intent to utilize an even amount of new and existing infrastructure. As it resulted, with the exception of the Olympic Villages, the Whistler Athletes’ Centre, the Second Olympic Cauldron, and the Whistler Celebration Site VANOC utilized existing infrastructure. The improvements made to the existing infrastructure was financially less than the planned construction of new venues. Although the renovations were funded by public taxpayers for facilities which are privately owned, the facilities are major economic generators for the community, drawing tourists and organizations to the area. Similarly, to primary hard infrastructure, the investments made to the secondary hard infrastructure projects are not to garner economic legacies in the community, but rather social ones; improving the quality of life of citizens in the community, as well as solidifying British Columbia as a tourism destination. Identified by Bramwell (1997) as important while planning the Games; the Vancouver teams took precedent in integrating the community together, making connections between sport, social, cultural, and civic infrastructure to better the region as a whole and not in a singular means.

With a focus on the secondary infrastructure constructed as new projects, the Olympic Villages and Athletes’ Centre was developed to serve a specific purpose and benefit the communities with additional non-market housing opportunities for individuals in their respective communities. Urban Planning principles were implemented into the
Vancouver Village, with an intent to partner with private organizations to foot the bill. Unfortunately, the private firm left the agreement due to the economic downturn during the organization phase. The increased financial burden to the budget as a result lessened the intended legacy of the village and resulted in condominiums being sold off at higher than anticipated costs to help aid in the payment of the project. Although the legacy of this project might be a failure in terms of what was intended, the Urban Planning strategies of incorporating private organizations to benefit a social need in a community is a success and an implementation which should be further investigated by future Olympic Bid Corporations and Organizing Committees.

Iain Macrury and Gavin Poynter (2010) conclude that in order for the financial investment towards infrastructure to succeed, the infrastructure must contain the means to provide resolution to a need in the community after the Games. In addition, proper planning should be implemented from the origination of the design to integrate the ideas of multiple levels of people destined to benefit from the infrastructure to achieve the greatest need from the investment. The Whistler Olympic Village and Athletes’ Centre helped serve a purpose in their community as well. In this case the benefit was for athletes and citizens. The Olympic Village was turned over to help aid the housing situation of employees coming to the region to work during the peak tourism times; the Athletes’ Centre serving as a community development centre where athletes and community members can integrate amongst one another.

**Tertiary Hard Infrastructure and its Impact on Urban Planning and Renewal**

McCartney et al. (2010) explored the impact of improvements to a municipality and whether it led to increased health and socioeconomic advancements. Their results
determined difficulties in solidifying answers to these questions, however, they conclude it is important to achieve the highest potential of legacy when implementing initiatives through the control of elected bodies, with an intention to formulate change. From a legacy perspective, tertiary hard infrastructure has great potential to impact the livability of a city to ease transportation efforts; improving safety and security, and environmental sustainability. Although the authors concluded minimal health improvements were justified, stress and pollutants were limited by the efforts of VANOC and these could in turn affect the health concerns of citizens into the future. In the case of Vancouver, the improvements to tertiary hard infrastructure included advancements to make the region more secure and ready to respond to threats of safety with ECOMM; improve the safety of commuters between Vancouver and Whistler with the advancements to the Sea to Sky Highway; and improvements to transportation and the environmental sustainability of the region with the construction of the Canada Line, and additions of the Waterway SeaBus Lines.

The Olympics provide a need and platform to showcase, utilize, and expand new technology. Vancouver is not alone with the technology improvements, and actually had a minimal scope of technology upgrades compared to recent hosts. Most of Vancouver’s upgrades came in terms of environmental additives to infrastructure, and were similar to all infrastructure adapted. In comparison, other recent Games technology advancements include communication technology which has changed revenue streams from Olympic Games after the introduction of satellite television, steadily causing an increase in television rights contracts every Olympic cycle (Horne, 2007); security and surveillance technologies as was the case in the London 2012 Games, with the installation of CCTV.
cameras (Giulianotti and Klauser, 2010); and finally, infrastructural technologies in Qatar 2022 for the FIFA World Cup stadia, to cope with the environmental, and climatic impediments of the region (Sofotasiou et al., 2015).

Although, Vancouver and the province of British Columbia agree that improvements were necessary to the Sea to Sky Highway, Horne (2007) is skeptical of the effect mega-projects have towards the community. He concludes that these projects are only as beneficial as the major stakeholders involved in designing, constructing, and benefiting from the projects make them out to be. In terms of Vancouver, and the findings of this research, the advancements taken to improve the tertiary infrastructure to withstand the increased traffic associated with the Games was positive. The improvements have resulted in increased safety, and usability; in some cases, the population has asked for the return of temporary infrastructure implemented during the Games.

**Other Legacy Pillars and the Intentions Impact Urban Planning and Renewal**

With regards to the other pillars of legacy, when discussing Sport legacies researchers must acknowledge the purpose of hosting an Olympics is to celebrate accomplishment in sport. However, as discussed by Kidd (2013), many Bid Corporations and Organizing Committees have neglected planning for sport development opportunities; instead, relying on the infrastructure put in place to generate interest amongst society, and sparking them to initiate their own sport opportunities. Kidd continues by highlighting specific Games that have been successful, with the OCOG achieving what they set out to accomplish, and witnessed their communities become instrumental to their sport landscape, because of the organizations put in place by the Bid
Corporation and Organizing committees. These include Los Angeles 1984 initiating the Amateur Athletics Foundation of Los Angeles (AAFLA), now LA84, which conducts coaching and youth development programs; Calgary 1988, initiating Calgary Olympic Development Association (CODA), which created a winter sport training centre, aiding in linking grassroots and elite athlete development; Barcelona 1992, whose teams incorporated multipurpose facilities into areas of the highest need showing spatial awareness of their community, and decentralizing the Games area to better impact their community the way they required; and Sydney 2000, who through the installment of the kayak and canoe facility, Whitewater Centre at Penrith, have been able to provide sport development to coaches and athletes, have also generated soft infrastructure by incorporating a program to share information from the organizing committee to students of local universities. Similarly, Vancouver instilled many of these traits into their hosting. Vancouver initiated 2010 Legacies Now and the Whistler 2010 Sport Legacies organizations to operate venues post-Games; they also facilitated the operating trust and Whistler Athletes’ Centre to ensure lasting infrastructure be available for future athletes to have opportunity and train.

Vancouver’s decision to utilize community centres and the construction of the Richmond Oval with the allocation of renovations to this infrastructure pre- or post-Games allowed the community to benefit from Sport Opportunities in areas of need. Although Vancouver made an effort to keep many pieces of infrastructure within close proximity of each other and the Olympic Villages, the central locations of those infrastructure allowed for decentralization opportunities which would make an impact in the community post-Games; specifically, the Killarney Centre, Britannia Centre, Trout
Lake Centre, and the Richmond Olympic Oval. VANOC’s affiliation with UBC also allowed educational opportunities for students at the institution, due to the role UBC took part in studying the impact of the Games.

From an Environmental pillar perspective, Vancouver made an effort to utilize previously disturbed land where possible, attempting to limit their effect on the use of land and giving purpose to land which had deteriorating value or limited use due to its previous functions in the community. In addition, Vancouver utilized educational and environmental campaigns, as well as by-laws to instill methods and processes to decrease waste leading up to and during the Games. The legacies include Air Quality and Greenhouse Gas Management, Sustainable Transportation Guidelines, with regards to infrastructure all facilities met LEED Green Building Standards, as well as the construction and addition to transportation systems infrastructure. According to Bob and Naidoo (2012), this is an effective means of education and environmental sustainability. People are likely to observe programs implemented when related to the sport mega-events, and the platform the Games provide is an opportunity to create and implement initiatives to have lasting effects long-term.

**Urban Planning and Renewal Strategies Initiated by the Bid Corporation & VANOC**

The term sustainability and its definition is the catalyst responsible for the growth and adaptation of the meaning of legacy. Sustainability, can be implied over varying topics, and situations ranging the six pillars of legacy; potentially the most discussed form of sustainability being environmental, researching humans and their effects and impacts on the global environment (Brown et al., 1987). Although Vancouver 2010 did
thoroughly address environmental legacies and sustainability throughout their efforts, Wheeler (2016) recommends sustainability and in turn legacies should equally or out-represent solutions to social, political, and economic issues. In this section of the Discussion, strategies that were implemented by the Bid Corporation and VANOC will be discussed. Moreover, further discussion will focus on how urban planning and renewal initiatives support the end goal of having productive legacies in the region.

**The Multiparty agreement**

Similarly, to conclusions by Brown (2003), the Multiparty Agreement signed by the Bid Corporation, the levels of government, the COC, and the FHFN, would be considered an act containing potential but also full of drawbacks. Multiparty agreements typically misalign the accountability, and actions, while not allowing the contract to be reworked to better align with the needs and capabilities of each stakeholder. The Multiparty agreement was the first of its kind relative to a bid corporation for an Olympic Games, with some sources citing it as a major contributor leading to the success of the bid. At the same time, this first case exposed there was still room for improvement in future Games. The ideology was correct: create a framework amongst invested stakeholders to distinguish roles and authority, as well as provide a platform for all stakeholders to declare needs, wants, and capabilities of contributing. The Agreement acted as a policy to distinguish the roles and responsibilities amongst stakeholders similarly to how the Bid Book acted as a framework or policy for VANOC to accomplish certain tasks required by the IOC. However, due to the structure and dissolution timeline of VANOC as an organization, other stakeholders including the FHFN will never be granted the opportunity to restructure the contract in the future if need be.
The levels of government, the COC, and other non-profit organizations such as 2010 Legacies Now, are in a similar situation to the FHFN, although one could argue they are superior in rank within the structural hierarchy of the Multiparty agreement, based on the expendable resources available at their disposal. For future sport mega-events, bid corporations and organizing committees should be obligated to better spread accountability in the post-Games era, with furthering resources to encompass broader legacies.

Games Operating Trust

An important and oft discussed topic around hosting sporting events is primary hard infrastructure. In the case of Vancouver 2010, there were 13 venues utilized for sport competition. The detractors of primary hard infrastructure most commonly discussed are the expenses of renovating and building these facilities, and whether they will benefit the community long-term. In the view of Simon Darcy and Tracy Taylor (2013) the venues typically do not pay off for the community based on their investment. However, as was found in this research of Vancouver 2010, there are more benefits and legacies to hosting an Olympic Games than economic advancements. Typically, sport facilities built for the purpose of the Games are designed to be more elaborate than the last; in order to achieve the largest benefit from the stadiums post-Games appropriate planning is necessary. Darcy and Taylor conclude, how important it is to understand a venues life cycle; determining if a venue should be designed for a temporary or permanent basis, and ensure there are potential social, environmental, and economic benefits which can be attained in the region during that life cycle. Most venues are
productive for 30 years, and in that time have maintenance costs which should be accounted for in the planning phase.

VANOC and the levels of government in Canada and British Columbia created the Games Operating Trust to minimize the strain of costlier sport facilities built for the Games period. The purpose of the Operating Trust was to provide financial stability for maintenance while the venues transitioned into legacy mode, and creating the ability to become self-sufficient from tourist and recreational revenue. The Operating Trust is a positive initiative of urban planning to avoid having white elephants, however, there is a way to grow the Operating Trust through usage and future hosting.

A future practice to aid non-profit organizations keep niche sport facilities operational and world-class, is an attempt to leverage future hosting opportunities. The ability of the region to host future events provides management of these facilities the ability to promote IFs to make donations to the Operating Trust, to continue the support provided to the facilities.

*Infrastructure Designs to Benefit the Community long-term*

For the purpose of the 2010 Games, 13 facilities were utilized for usages directly related to sport; 15 more facilities were utilized as requirements of the Games or enabling the region to handle the capacity of the Games. Some of the infrastructure developed for the purpose of the Games will remain, most altered and reduced, and some eliminated. Preuss (2007) recommends keeping six pieces of primary hard infrastructure to complete the legacies necessary for a region post-Games to serve the economic, tourism, and living needs. As briefly discussed in previous sections, VANOC was able to decentralize primary infrastructure to impact a larger percentage of the community, and similar
strategies were conducted with regards to the secondary and tertiary hard infrastructure projects. This planning strategy has provided the infrastructural framework to the community to provide for the community. In addition, each venue renovated or constructed was designed with a plan to alter post-Games into legacy mode to fully respond to the needs of the community. The sport opportunities made available within these facilities range broadly to include municipally provided recreational sport, privatized tourism recreational sport, and training opportunities ranging from grassroots level to elite sport. Although, as an organizing committee it is important to engage in planning the allocation of responsibility post-Games to optimize legacies, it is rare to find communities internationally with the capacity of broad infrastructure constructed. This lack of capacity amongst municipal governments ensures a place for third party non-profit, and private organizations to provide opportunity for the community (Alexandris and Carroll, 1999).

In addition to the design of the infrastructure, planning principles put in place to achieve urban renewal include the selection of land to develop. To an organization like VANOC, land is considered a resource. For them, it is a resource because they need it to achieve their final goal. For a for-profit organization, land could be considered a resource but also an asset, as it maintains and increases in value. However, the value of land is directly attributed to the spatial productivity of the land, and region it is part of (Louw and Van Amsterdam, 2011). This spatial productivity is a driving force of urban renewal and revitalization campaigns, with tenants and land owners wishing to improve property value through property potential and purpose. Typically, through social initiatives, municipalities or organizations attempt to provide resources in larger quantities to areas,
enticing investment from other organizations. These initiatives can take place on previously disturbed land such as industrial areas and landfills, or lower socioeconomic neighbourhoods.

In the case of Vancouver, their attempts were to incorporate the two objectives of urban renewal above. The first and primary means of urban renewal was utilizing previously disturbed land; some examples of urban planning were through the construction of infrastructure on previously disturbed sites such as the Olympic Villages, Whistler Olympic Park, Richmond Olympic Oval, and the Vancouver Olympic Centre. In terms of promoting investment in lower socioeconomic regions, VANOC was generally unsuccessful by not enticing or initiating new opportunities well enough. Their intentions were indirect and through integration; by constructing the Olympic Villages, and having allocated a percentage of the dwellings post-Games to social housing, Vancouver was attempting to integrate lower socioeconomic populations into a neighbourhood with people of higher socioeconomic status. This process is called ‘gentrification induced social mixing’ by Lees (2008) who went on to criticize the idea citing it as a cosmetic procedure, only trying to cover up a problem; that it only results in further segregation of classes, and that more is taken away from the lower socioeconomic class than is ever provided.

*Transportation Infrastructure Design to Accommodate Games, Aligning with Ideals of the Community*

Vancouver and surrounding areas received upgrades to public transportation for the Games period. The upgrades, include the Canada Line, the Olympic Line streetcars, the Waterway SeaBus, and city bus systems; many of which are integral to connecting
Inner-Vancouver to suburbs and surrounding towns, without utilizing the highway system. Winston (1991) concludes that improvement to transportation infrastructure is instrumental to successful growth of municipalities. However, municipal or provincial governments should have further considered the potential costs associated with the usage of the infrastructure and whether the revenues would support maintenance costs, prior to engaging in funding from federal levels of government. In this case, the capital projects were funded by government and in some cases partially funded by private enterprise, due to the hosting of the Games. Throughout the literature, there is no mention of the cost of ridership amongst the various transportation modes, except for free bus rides between Vancouver and Whistler for spectators with Olympic competition tickets.

The intentions of developing the Canada Line and improving the SkyTrain system was to better connect the core of Vancouver with the airport and Olympic Oval in Richmond. Khosa and Naidoo (1998) mention they found that areas with the most abundant transportation facilities are capable of becoming a busy epicenter within a municipality. The diverse forms of transportation also allow there to be a more diverse group of people present providing diversification of socioeconomic classes, gender, age, race, and culture. During the Games period the centralized location of the Jack Poole Plaza, Canada Place, and the Vancouver Convention and Exhibition Centre had the most readily available sources of transportation. This led to an increase in participation, not only by those attending sporting events in the core, but also general public visiting the area to encounter the festivities and culture present at Celebration Sites.

In the post-Games era, changes have occurred to the transportation systems and the related infrastructure. Some of the transportation infrastructure, including the
Vancouver Streetcars, were temporary, and removed from service; and others including the SeaBus fleet returned to original size after the new ferries replaced deteriorating ones. However, the improvements and capital projects remain altered and productive throughout the region. Gratton and Preuss (2010) argue that despite all the investment and efforts to convert the infrastructure into legacy mode, the only potentially meaningful and useful infrastructure left behind is the major transport links. However, due to the fast pace and short timeframe of planning, it is typical for these projects to be under planned. So long as the investment into the project, and the application processes of construction do not interfere with the environment or operations of the region, the infrastructure should be a success. An example they provide is Albertville 1992 where the highway restoration to allow safer passage for visitors deteriorated the visual appeal of the mountainous region. The Sea to Sky Highway, had a similar effect with the preservation of protected land, and it raises the question of why is this so? With the highway known to officials, and only accelerated due to the hosting of the Games, why was there not already a rough plan established. This is an Urban Planning issue amongst many municipalities and regions, not just those bidding and hosting mega-events; showcasing poor forecasting and proactivity.

Infrastructure Designed to Impact the Community without Sport

In earlier sections the term Urban Regeneration was defined, and determined to be a path to achieving Urban Renewal. Urban Renewal is defined in this study as a process which provides opportunity for social inclusion and addressing the needs of disadvantaged groups. Examples can range from social programs, to infrastructure; however, the ideology of Urban Renewal is bigger than any one task, it is a process of
multiple projects in a community. In Taks’ (2013) brief analysis of the topic, she states that urban regeneration is strictly physical, and a component of infrastructural legacy. By this definition, the infrastructure built by VANOC is a means of urban regeneration, however, it is the social policies, the additional urban planning by VANOC, to create non-profit organizations and ensuring post-Games ownership plans which provides the potential for Urban Renewal.

For the municipality of Vancouver and the RMOW, the Olympic Games provided an opportunity to enhance aspects of their communities. Much of the infrastructure was specific to sport; however, the supporting infrastructure provides a community with additional social space. Derom and Vanwynsberghe (2015) discuss a relationship between liminality and communitas, where liminality is a factor that creates an environment able to be leveraged, and communitas is a factor which creates an environment prime for leveraging through increased sense of community. This relationship between liminality and communitas can be utilized to describe multiple components of the Bid and hosting period. Liminality was observed when the organizing committee decided to make improvements to specific neighbourhoods within the RMOW and Vancouver and its surrounding areas that has benefited the community long after the Games. This provided an opportunity the citizens would enjoy and celebrate, garnering interest in the event as a result. Another example includes interested stakeholders understanding how they can benefit from facility improvements if they contribute towards hosting the Games. Specifically, UBC committed only a portion of financial aid towards their new sports facility, which without the hosting of the Games would have had
to pay the full cost of construction for the facility, and not received financial aid from the government.

Communitas was created through the location of facilities; designing them to be built in close enough proximity to create a celebratory atmosphere and garnering a buzz throughout the community. Other specific infrastructure created which resulted in improved communitas was the Celebration Sites, Jack Poole Plaza, and the Whistler Medals Plaza. These locations all provided social space for the community to gather and celebrate the experience; with exception to the Celebration Sites, these spaces still exist and provide similar space for residents and tourists to enjoy and celebrate the heritage of the community.

Finally, the last form of infrastructure to benefit the region without relying upon sport are the convention and exhibition centres. Vancouver already had the Vancouver Convention and Exhibition Centre as well as Canada Place, which only needed renovations; the RMOW already had the Whistler Convention Centre, and that needed renovations. The renovations relative to each facility varied in scope and size, however, the renovations solidified the intent of each Conventions Centres’ ownership group to continue to be the dominant hosts of business tourism in the region. Donoho (2017) highlights the importance of successful cities who utilized convention centres to provide a form of urban renewal to their host cities, stating that Convention and Exhibition Centres cannot be islands within a region. In order to receive the most benefits from this type of infrastructure, and grow as a business tourism destination, these facilities must be central to other experiences.
In the case of Vancouver, the convention and exhibition centres are centrally located in the downtown area; centralized in a district which is most accessible in terms of transportation hubs in the region, making it easy to travel to other surrounding areas to experience attractions, in addition to the attractions in close proximity. The Whistler Convention Centre is located within Whistler, and allows tourists to experience the heritage and culture of the village as well as other sport tourism opportunities.

**Legacy Engagement and Accountability on Stakeholder Organizations**

Vancouver was one of the first sport mega-events to exploit Public-Private Partnerships (PPPs). Through the projects of the SkyTrain and the Olympic Villages, VANOC was able to limit the financial pressure placed on themselves, the municipalities and the levels of government. The theory behind PPPs is to have private firms and companies become responsible for designing and constructing components of infrastructure needed for the community. They take accountability for the project while still understanding they are building the facilities to serve a purpose and meet the needs of the Municipality and Organizing Committee. Regan, Smith, and Love (2011) conclude in their work that PPPs are a way to limit the risk associated with large projects for both firms. They are state infrastructure programs, that take the operational risk away from the government. Also, the full life cycle, including operational and maintenance costs of the infrastructure, are addressed by the private enterprise, as they will typically operate, maintain, and request the revenues from the infrastructure. This is similar to the Canada Line SkyTrain and its operations structure; and the intentions of the Vancouver Olympic Village prior to the Millenium Corporation defaulting, resulting in the City of Vancouver having to sell the remaining condominiums to pay off their debt. In summary, PPPs have
become the future with respect to bidding and hosting Sport mega-events. However, more contractual agreements must be arranged to safeguard the public stakeholders, as the private enterprises may be reluctant to part ways if the world economic situation fluctuates during the construction process.

Zagonari (2011) stated that many models have been created to apply planning methods; however, emphasized few, if any, noteworthy models have been created to incorporate stakeholder participation, to a point where an organization has been able to succeed. This shows a weakness of CPT and Social Choice Theory, as they are sometimes difficult to adapt. A strength of the Bid Corporation and VANOC was their ability to delegate tasks to marketing partners such as Coca Cola, RBC, Bell, and Petro Canada. Having these marketing partners operate and initiate legacy programs for the Games; including the Olympic Torch Relay, Coca Cola Mittens and Scarves Campaign, Bell’s Games Sponsorship, and Petro Canada: Aboriginal Art and Community Engagement initiatives. These intersections between corporations and legacy efforts allow the organizations to build relationships with the region, while also taking burden off the Organizing Committee. This provided VANOC the lesser task of supervision and oversight versus a full planning role; thereby allocating their harder efforts to potentially accomplish more in the rapid timeline of planning the Games.

Overall, VANOC’s ability to incorporate stakeholders into the production of legacy and urban planning and Renewal strategies is what has allowed VANOC to have a larger impact. Although they may not receive as much credit as they deserve, it is difficult to determine how large of an impact these decisions may have had on other aspects of the Games in its ability to finance other legacy projects. In terms of planning,
at first glance it may seem as though the Bid Corporation enacted CPT and/or Social Choice Theory; however, after analyzing and applying Zagonaris’ theory, it is evident that VANOC did not settle for those planning theories alone. VANOC incorporated many theories in order to accomplish numerous tasks, and one could argue the most appropriate model or theory to encompass the necessary decisions required while bidding and hosting a sport mega-event will never be created. There are many individual tasks concerned with many topics. In terms of legacy and this study alone, there are 6 pillars to consider; moreover, every community is different, ranging from their functionality, to their needs.

**Recurring Themes Throughout the Bid and Planning Processes**

*Environmental Proactivity*

Vancouver has committed to become the greenest city by 2020. A competition amongst metropolitan hubs worldwide, the competitors are aiming to become fully environmentally sustainable, implementing new practices and technologies to its infrastructure. In Vancouver’s definition of urban planning, it strictly highlights the importance of maintaining the communities’ natural beauty; not impacting the land as a consequence of further development and growth. VANOC stated their determination to work collectively with organizations and stakeholders internationally, to develop and implement tools necessary to adhere to climate commitments.

Throughout the Bid Process and Organizing phase, the Vancouver Olympic Bid and Organizing Committees were set on improving the environmental sustainability of the infrastructure used; limiting the impact and footprint of the facilities. Prior to design of infrastructure, land development took into effect the state of the land, utilizing previously disturbed land, or utilizing construction strategies to affect the environment as
minimally as possible. Through relocation of species and plants, the environment was affected, however, the ecosystem was replaced in wholeness to resume regular life. It is irresponsible of any organizing committee to promise a pollution free Games due to the increased traffic, and construction in the region as they prepare to host; however, VANOC was able to host a carbon neutral Games by creating an offsetting program to limit emissions in certain aspects, to account for the increases in other projects. For instance, VANOC’s heavy promotion of public transportation, carpooling, and less travel to the Games, was an effort to offset the increased tourism presence.

Vancouver’s intent to re-use building materials, for renovated or new infrastructure, limited the construction machinery and disposal practices that otherwise would have need to be conducted to discard of the material.

**Canadas’s Games, Accessibility, and Inclusivity**

Vancouver as a community, like many municipalities had groups and individuals against the idea of bidding for and hosting the Winter Games. Included in these groups were the IOCC, who submitted a report pertaining to issues they felt needed to be addressed in the community to accept the idea of a bid. The Bid Corporation responded with the creation of the 2010 Winter Games Inner-City Inclusive Commitment Statement. The statement included the approach the Organizing Committee would be obligated to take to create a foundation for which inner-city organizations and individuals could create socio-economic opportunity. The organization “Opportunities Starting Now” was created through the Vancouver Agreement to aid in these efforts, and initiate the change.

VANOC in response to the IOCC adopted goals and objectives for itself, member partners and other stakeholders to follow throughout the organizing process. These goals
and objectives ensured the inner-city and those living in it would not be neglected; the Games were more accessible and beneficial to all Canadians, making them Canada’s Games (Appendix 6).

The municipality of Vancouver held a plebiscite on 22 February 2003; the result of the vote was 63.4% in favour. Although the plebiscite passed, and the voting population was prominently higher than average turnouts for municipal votes (GamesBids, n.d.), the Bid Corporation and VANOC understood that more inclusion was necessary to maintain a positive memory and experience in the minds of constituents post-Games.

Throughout the Bid Book and VANOC final documents there are messages from the CEO and other members, stating an intent to unite the nation; providing an accessible Games, through sport experience, infrastructure, socioeconomic opportunities, and celebrations. These four categories symbolize the importance of new infrastructure during the Games. Examples include the second Olympic Cauldron, as it provided opportunity for all individuals to witness a symbol of the Games, despite not entering BC Place; the Celebration Sites, offered an opportunity to converge with other Canadians, or supporters from other nations, to celebrate the accomplishments of athletes; the Whistler Medals Plaza, delivered space for celebration and recognizing achievement in Whistler; and the Celebrate 2010 Initiative, awarded lower socioeconomic individuals with tickets to attend and experience different aspects of the Games. Although these legacies have all been discussed as providing different opportunities individually, when combined and observed together, they also serve a purpose of uniting a population. The purpose of these
infrastructure during the Games period is well documented; however, it is unknown if these legacies have held their value post-Games, it is also beyond the scope of this study.

*Avenues for Sport Development*

A recurring theme evident throughout the Bid and Planning phase is the design of Olympic infrastructure to better provide recreational opportunities post-Games. New facilities were designed with the future in mind, and existing facilities were renovated to better align the infrastructure with the present and expected future needs of the community. The infrastructure underwent renovations to prepare it for legacy mode, in most cases preparing infrastructure for community usage and recreational purposes. Examples of infrastructure developed or renovated for recreational use included the Trout Lake Community Centre, Killarney Community Centre, and Brittania Community Centre. The UBC Thunderbird Arena provides community recreation services to compliment the University populations’ usage; and the Richmond Olympic Oval provides recreational community opportunities, and training centres, while maintaining the capacity to host smaller events relative to competitive sport.

The location of the Whistler Nordic Centre and Whistler Sliding Centre allows the infrastructure to benefit from the already existent tourism industry post games. Other examples of primary hard infrastructure include Cypress Mountain which had renovations completed to allow it to be a larger tourist attraction post-Games in Vancouver; and Whistler Creekside to continue to enable itself to be a premier ski destination into the future for both tourists and competition. Moreover, the tourism industry is somewhat affiliated with high performance sport development and
opportunities. Whistler attracts people to the area to train but also compete which attracts athletes, sponsorship and spectatorship to the region.

The Whistler Athletes’ Centre was constructed to aid high performance sport and the attractiveness of the RMOW as a training site for elite athletes. The Athletes’ Centre provides accommodation, and training equipment while athletes train at Whistler Creekside. Similarly, UBC provides space for high performance sport, including Varsity athletes and in some instances, Hockey Canada. BC Place, Canada Hockey Place, and the Hastings Park Pacific Coliseum were all renovated to continue to serve the needs of professional or high performance sport teams in the region. In addition, these facilities also attract tourists from the region for other entertainment, including concerts and shows.

Based on the results of this study in addition to the topics discussed above, the argument can be made that Vancouver 2010 was successful as it pertains to this study. The primary research question and purpose of this research was to determine through analysis, the extent that urban planning and renewal was initiated within the planning process, and the success or failure of VANOC to abide by the Bid Corporations plans. Through the analysis of the Bid Book and final documents, the consistent reference to legacies, and explanation of facility conversion clarified the intent of the Bid Corporation to fulfill community needs; drawing attention and support to the process in terms of sport entertainment and practicality of municipal usage.

Throughout the discussion and research at various points, there was reference to other Olympic Games; including their successes and failures, symbolism to their nation and the world, as well as the lack of interested host cities due to the strain placed on
communities and regions. Like any public decision, it is impossible to please everyone, and inevitable that there will be groups within communities to oppose decisions. People will argue that the Bid Document did not provide enough depth on how to accomplish goals; where others will focus on specific initiatives or projects that received fewer resources and funding. In the case of Vancouver 2010, both the Bid Corporation and VANOC strived to include and address concerns of minority groups and demographics in the decision making processes. This in turn led to the overwhelming support and success in Vancouver, and why as evidenced from the local media quotes, more people were pleased with the outcomes and results than those who opposed.

In conclusion, there is always room for improvement. Did VANOC accomplish everything promised by the Bid Corporation exactly how it was outlined? The answer is no; there will never be a case where this happens. Every day the world is changing and communities are adapting, altering the needs of their constituents. Evolutions in technology and knowledge allow for newer and better ideas, with better results, however, there is a potential for higher costs. If there ever is a time when an OCOG does accomplish everything outlined in the Bid Book, the world will have reached a point of stagnancy, without motive to improve. However, what VANOC did accomplish in their efforts was the ability to remain transparent and balanced through the transition from ‘Candidate City’ and ‘Bid Corporation’ to ‘Host City’ and ‘OCOG’ initiating the changes set out by their predecessors within the community. They aligned their efforts to improve sport development in the region, upgrading facilities in need and developing new facilities within neighbourhoods of need. The decisions VANOC made with regard to completing the requirements from the Bid Book were with the longevity of the
community at the forefront, ensuring the city was adapting and not allowing functionality to deteriorate overtime.

**Future Research**

Throughout the research project it became evident there are more ways to expand this project or hone in on specific aspects. However, focusing on the Vancouver 2010 Games, it may be too late to focus on the Bid and Planning phase. For the purpose of this study, there was enough information available to critically examine the infrastructure built for the Games and the Urban Planning and Renewal impacts on the community; however, from a social and environmental perspective, it may be more beneficial to begin research projects at an earlier stage in the bid phase.

A future area of focus that would reuse the framework of this study, is a longitudinal study for Beijing 2022; making these Games a focus would allow researchers to begin research during the Organization Phase, having easier access to more readily available information. With the Games already awarded to the host city of Beijing, the information related to the Bid Process is complete and ready to be analyzed. It would be beneficial to the discussion regarding the urban planning processes to understand what is occurring in real time with regards to changes or decisions regarding the organization of the Game.

Another way to utilize this framework would be to conduct a longitudinal study on a Summer Olympic Games. The summer event is larger in terms of international participation, resulting in more interest and international spectatorship, and therefore larger sponsorship opportunities; and number of sports and events leading to increased demands for required infrastructure. The greater quantity of infrastructure, provides
opportunity for a larger impact on the community, increasing the importance of Urban Planning to achieve positive legacies in the region, to achieve Urban Renewal. Further research to understand the impacts of Hard Infrastructure on the process of Urban Renewal is important, especially in comparison to the importance of social legacies. Throughout the research it became evident that Hard Infrastructure is the catalyst to create change; however, the planning to create organizations and policies to foster change is integral to the consistent and beneficial use of infrastructure. The theory of legacies, as found in the literature reviewed, is an ever changing revolving door, and the only way to succeed is to thoroughly research and plan prior to the Bid what is needed in the host community; and create ways to ensure the necessary plans come to fruition.

Additional aspects available in the study could be the incorporation of interviews. Although there is enough published information to conduct and base this study, the inclusion of interviews could add another dimension to provide a more robust and conclusive discussion. A longitudinal study occurring during the Bid and Organizing phases could provide easier access to interview opportunities; these organizations would still be intact and functioning, easing the process to access them for comment and feedback.

Finally, as an example of the difference of communities’ needs and in comparison to Vancouver, future Olympic host, Los Angeles’ 2028 bid, focused on shaping the Primary Hard Infrastructure while utilizing existing facilities at local universities for Athletes Villages and other Secondary Hard Infrastructure (Livingstone, 2017; Dyreson & Llewellyn, 2010). In contrast, South Korea has hosted a Summer Games in 1988 and have hosted the 2018 Winter Games. Both times, the Olympic festivals have acted as a
message to the World on ways they wish to be seen; first in 1988 as becoming independent and separate from North Korea, and more recently using the Games as a way to show peace and unity is plausible in the region (Zaccardi, 2018). In conclusion, it is evident that as long as there are sporting events occurring, the demands on communities will continue to exist. With the continued hosting of mega-events, there is an ability to conduct similar research and provide comparative measures which will one day lead to negative-impact free Games; including the extinction of ‘White Elephant’ infrastructure, and meaningful social legacies world wide.
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**APPENDIX 1**

Vancouver Primary Hard Infrastructure

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<tr>
<td>Project Type</td>
<td>Project Name</td>
<td>Existing/New</td>
<td>Renovations</td>
<td>Project Usage</td>
<td>Current Owner</td>
<td>Future Owner</td>
</tr>
<tr>
<td>--------------</td>
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</tr>
<tr>
<td>Secondary</td>
<td>IBC (Richmond Trade and Exhibition Centre)</td>
<td>New</td>
<td></td>
<td>International Broadcast Centre</td>
<td>Government of Canada</td>
<td>City of Richmond</td>
</tr>
<tr>
<td>Secondary</td>
<td>IBC (Vancouver Convention and Exhibition Centre)</td>
<td>Existing</td>
<td>Renovate</td>
<td>International Broadcast Centre</td>
<td>BC Pavilion Corporation</td>
<td>BC Pavilion Corporation</td>
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<tr>
<td>Secondary</td>
<td>MPC (Vancouver Convention and Exhibition Centre)</td>
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<td>Renovate</td>
<td>Main Press Centre</td>
<td>BC Pavilion Corporation</td>
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<tr>
<td>Secondary</td>
<td>MPC (Canada Place)</td>
<td>Existing</td>
<td></td>
<td>Main Press Centre</td>
<td>Canada Place Corporation</td>
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<tr>
<td>Secondary</td>
<td>Second Olympic Cauldron</td>
<td>New</td>
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<td>Represent Games in effect</td>
<td>City of Vancouver</td>
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<tr>
<td>Secondary</td>
<td>Media Facilitites</td>
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<td>City of Vancouver</td>
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<tr>
<td>Secondary</td>
<td>WMC (Whistler Conference Centre)</td>
<td>Existing</td>
<td></td>
<td>Whistler Media Centre</td>
<td>Coast Mountain Reservations</td>
<td>Coast Mountain Reservations</td>
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<tr>
<td>Temporary</td>
<td>Whistler Celebration Site</td>
<td>New</td>
<td></td>
<td>Medal Award Ceremonies</td>
<td>RMOW</td>
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</tr>
<tr>
<td>Temporary</td>
<td>Whistler Athletes’ Centre</td>
<td>New</td>
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APPENDIX 3
<table>
<thead>
<tr>
<th>Tertiary Hard Infrastructure</th>
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<tr>
<td><strong>Project Type</strong></td>
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<tr>
<td>Permanent</td>
</tr>
<tr>
<td>Transportation</td>
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<tr>
<td>Translink</td>
</tr>
<tr>
<td>Province of BC</td>
</tr>
<tr>
<td>City of Vancouver</td>
</tr>
<tr>
<td>Temporary</td>
</tr>
<tr>
<td>Waterway SeaBus</td>
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<tr>
<td>Sea to Sky Highway</td>
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<tr>
<td>Vancouver Streetcars</td>
</tr>
<tr>
<td>Canada Line (SkyTrain)</td>
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<td>Telecommunication &amp; Internet</td>
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<td>Communications Companies of Canada</td>
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## APPENDIX 5.1

### Soft Infrastructure Legacy Projects

<table>
<thead>
<tr>
<th>Bid Corporation Intent</th>
<th>VANOC Completed</th>
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</thead>
<tbody>
<tr>
<td>Social and Community Impact Assessment</td>
<td></td>
</tr>
<tr>
<td>Test events/Olympic Games</td>
<td></td>
</tr>
<tr>
<td>OCOG advancing role of Women in Sport</td>
<td></td>
</tr>
<tr>
<td>Local team of technological implementation experts</td>
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<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
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<tbody>
<tr>
<td>Z2010</td>
<td>Sustainability Management and Reporting System (SMRS)</td>
</tr>
<tr>
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<td>Sustainable Sport and Event Toolkit (SSET)</td>
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## APPENDIX 5.2

### Economic Legacies

<table>
<thead>
<tr>
<th>Economic Legacies</th>
<th>Bid Corporation Intent</th>
<th>VANOC Completed</th>
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</thead>
<tbody>
<tr>
<td>Vancouver OCOG Asset</td>
<td>Disposal</td>
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<tr>
<td>Licensed Merchandise</td>
<td>Coin Program</td>
<td></td>
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<td>Future Hosting</td>
<td>Future Hosting</td>
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<tr>
<td>Tourism</td>
<td>Tourism</td>
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<td>Construction</td>
<td>Bell’s Games Sponsorship</td>
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<td>Local Design work</td>
<td>RTEC</td>
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### Environmental Legacies

<table>
<thead>
<tr>
<th>Bid Corporation Intent</th>
<th>VANOC Completed</th>
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<tbody>
<tr>
<td>Green Buildings</td>
<td>Green Buildings targeting LEED</td>
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<tr>
<td>Air Quality and Greenhouse Gas Emissions</td>
<td>Air quality and greenhouse gas management</td>
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<td>Natural and Cultural Heritage</td>
<td>Natural and Cultural Heritage</td>
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**Environmental Studies**

<table>
<thead>
<tr>
<th>British Columbia Waste Management Act</th>
<th>Sustainable Transportation Guidelines</th>
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</thead>
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<tr>
<td>Public Transportation/ Park and Ride Spaces</td>
<td>Consultation and Collaboration</td>
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<td>International Gold Standard Projects</td>
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## Sport Legacies

<table>
<thead>
<tr>
<th>Bid Corporation Intent</th>
<th>VANOC Completed</th>
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<tr>
<td>2010 LegaciesNow Society</td>
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<tr>
<td>Physical Fitness and Amateur Sport fund</td>
<td>Whistler 2010 Sport Legacies</td>
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<tr>
<td>Legacy Plan for Games Surplus</td>
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<tr>
<td>Legacy Endowment Fund</td>
<td>Games Operating Trust</td>
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<tr>
<td>Participation in Games</td>
<td>Celebrate 2010 Initiative</td>
</tr>
<tr>
<td>Para-Sport accessibility</td>
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<tr>
<td>SFU Oval</td>
<td>Richmond Olympic Oval</td>
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<tr>
<td>Whistler Athletes Centre</td>
<td>Whistler Athletes Centre</td>
</tr>
<tr>
<td>Multi-facet facilities</td>
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<td>SportChannel</td>
<td>Aboriginal Youth Sport Legacy Fund</td>
</tr>
<tr>
<td></td>
<td>2010 Indigenous Youth Gathering (2010 IYG)</td>
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**APPENDIX 5.5**

**Information and Education Legacies**

<table>
<thead>
<tr>
<th>Bid Corporation Intent</th>
<th>VANOC Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Information, education and awareness program</td>
<td>Games Time Activities</td>
</tr>
<tr>
<td>Sustainability education and skills training</td>
<td>Sustainability Star Program</td>
</tr>
<tr>
<td><strong>Sustainability Journey</strong></td>
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</tr>
<tr>
<td>UBC Sport Centre</td>
<td>Centre for Sport and Sustainability at UBC</td>
</tr>
<tr>
<td>Skill Development Programs</td>
<td>RONA Vancouver 2010 Fabrication Shop</td>
</tr>
<tr>
<td><strong>Just Beginnings Flowers</strong></td>
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</tr>
<tr>
<td>Transportation Public Information Campaign</td>
<td>TravelSmart</td>
</tr>
<tr>
<td>International Image Campaign</td>
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</tr>
<tr>
<td>Olympism Education Portal</td>
<td>Vancouver 2010 Education Program</td>
</tr>
<tr>
<td>Participation In and Learning through Sport</td>
<td>&quot;Do Your Part&quot;</td>
</tr>
<tr>
<td>Can-Do</td>
<td></td>
</tr>
<tr>
<td>World-Youth Link</td>
<td></td>
</tr>
<tr>
<td>Intellectual Muscle: Dialogues for the 21st Olympiad</td>
<td></td>
</tr>
<tr>
<td><strong>Outplacement Program/Beyond 2010</strong></td>
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### APPENDIX 5.6

**Public Life, Culture and Politics Legacies**

<table>
<thead>
<tr>
<th>Public Life, Politics, and Culture Legacies</th>
<th>VANOC Completed</th>
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<tbody>
<tr>
<td><strong>Bid Corporation Intent</strong></td>
<td><strong>Public Life, Culture and Politics Legacies</strong></td>
</tr>
<tr>
<td>Olympic Arts Fund</td>
<td>Vancouver 2010 Venues' Aboriginal Art Program</td>
</tr>
<tr>
<td>Multi-Party Agreement</td>
<td>MPA</td>
</tr>
<tr>
<td>Vancouver Agreement</td>
<td>Bell Vancouver Agreement Donation</td>
</tr>
<tr>
<td>Callaghan Valley</td>
<td>Shared Legacy Agreement-Squamish and Lil'wat Nations</td>
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<tr>
<td>Whistler Olympic Village</td>
<td>Cultural Olympiad</td>
</tr>
<tr>
<td>Security Technology</td>
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<tr>
<td>Community Consultation</td>
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<tr>
<td>Olympiad Cultural program 2006-2010</td>
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<td>Olympic Flame Relay</td>
<td>Olympic Torch Relay</td>
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<td>Olympic Arts Festival</td>
<td>Celebration Sites</td>
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<td>Olympic National Team Artists</td>
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<tr>
<td>Olympic Museum Exhibition</td>
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</tr>
<tr>
<td>Youth Camp</td>
<td></td>
</tr>
<tr>
<td><strong>Mascots</strong></td>
<td></td>
</tr>
<tr>
<td>Opening/ Closing Cermonies</td>
<td></td>
</tr>
<tr>
<td>Accessible Games</td>
<td></td>
</tr>
<tr>
<td>Ray-Cam Co-operative Centre Sport Court</td>
<td></td>
</tr>
<tr>
<td>Coca Cola Mittens/scarves</td>
<td></td>
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<tr>
<td>2010 Aboriginal Pavillion</td>
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## 2010 Winter Games Inner City Inclusive Commitment Statement

<table>
<thead>
<tr>
<th>Goals</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessible Games</strong></td>
<td>Develop barrier free venues for people with disabilities</td>
</tr>
<tr>
<td></td>
<td>Ensure reasonable accessibility for people with disabilities</td>
</tr>
<tr>
<td><strong>Affordable Games Events</strong></td>
<td>Make affordable tickets available for Vancouver’s low-income inner-city residents, including at risk youth and children</td>
</tr>
<tr>
<td><strong>Affordable Recreation and Community Sport</strong></td>
<td>Maximize inner-city residents’ access to the new and public upgraded facilities after the Winter Games</td>
</tr>
<tr>
<td></td>
<td>Maximize access by inner-city residents, at-risk youth and children to sport and recreational initiatives by building from the current sport delivery infrastructure</td>
</tr>
<tr>
<td><strong>Business Development</strong></td>
<td>Develop opportunities for existing and emerging local inner-city businesses and artisans to promote their goods and services</td>
</tr>
<tr>
<td></td>
<td>Develop potential procurement opportunities for businesses that employ local residents</td>
</tr>
<tr>
<td><strong>Civil Liberties and Public Safety</strong></td>
<td>provide for lawful, democratic protest that is protected by the Canadian Charter of Rights and Freedoms</td>
</tr>
<tr>
<td></td>
<td>Ensure all inner-city residents’ continued access to public spaces before, during and after the Games and provide adequate notice of any restrictions of the use of public space/facilities and prominently display alternate routes and facilities</td>
</tr>
<tr>
<td></td>
<td>Maintain the current level of public safety and security in inner-city neighbourhoods during the Winter Games</td>
</tr>
<tr>
<td></td>
<td>Commit to a timely public consultation that is accessible to inner-city neighbourhoods, before any security legislation or regulations are finalized, subject to lawful and legitimate confidentiality requirements</td>
</tr>
<tr>
<td></td>
<td>Ensure RCMP is the lead agency for security</td>
</tr>
<tr>
<td><strong>Cultural Activities</strong></td>
<td>Showcase the diverse cultural, multicultural and aboriginal activities of inner-city residents</td>
</tr>
<tr>
<td><strong>Employment and Training</strong></td>
<td>Create training and a continuum of short and long-term employment opportunities for inner-city residents to encourage a net increase in employment.</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Provide reasonable wages and decent working conditions for any local worker producing Games related goods and services before and during the Winter Games.</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Ensure environmental &quot;best practices&quot; in inner-city neighbourhoods.</td>
</tr>
<tr>
<td></td>
<td>Provide adequate funds to maintain and operate the new or upgraded public recreational facilities after the Games to maximize the number of facilities available to inner-city residents.</td>
</tr>
<tr>
<td><strong>Financial Guarantees</strong></td>
<td>Provide adequate programming funds for the new or upgraded public recreational facilities to encourage maintenance or increase in recreation programs.</td>
</tr>
<tr>
<td></td>
<td>Provide disclosure of all financial aspects of the Games, including expenditures and revenues, in the bidding and organizing phase of the Games.</td>
</tr>
<tr>
<td></td>
<td>Commit to a comprehensive annual financial audit.</td>
</tr>
<tr>
<td><strong>Health and Social Services</strong></td>
<td>Maintain delivery of health and social services to inner-city residents during the Winter Games.</td>
</tr>
<tr>
<td></td>
<td>Showcase a commitment to public health issues, including a comprehensive alcohol and drug strategy.</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>Protect rental housing stock. Provide as many alternative forms of temporary accommodation for Winter Games visitors and workers.</td>
</tr>
<tr>
<td></td>
<td>Ensure people are not made homeless as a result of the Winter Games. Ensure residents are not involuntarily displaced, evicted or face unreasonable increases in rent due to the Winter Games.</td>
</tr>
<tr>
<td></td>
<td>Provide an affordable housing legacy and start planning now.</td>
</tr>
<tr>
<td><strong>Input to Decision Making</strong></td>
<td>Provide inclusive representation on the Bid Corporation's and Organizing Committee’s Board structures and all relevant Bid Corporation and Organizing Committee's work groups.</td>
</tr>
<tr>
<td></td>
<td>Ensure inner-city inclusive work continues to operate under the Organizing Committee and its Member Partners. Work with and be accessible to an independent watchdog group that includes inner-city residents.</td>
</tr>
<tr>
<td></td>
<td>Develop full and accountable public consultation processes that include inner-city residents.</td>
</tr>
<tr>
<td>Input to Decision Making</td>
<td>Document opportunities and impacts experienced in inner-city neighbourhoods in a comprehensive post-Games evaluation with full participation by inner-city residents</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Neighbourliness</td>
<td>Stage events that respect adjacent neighbours</td>
</tr>
<tr>
<td>Transportation</td>
<td>Ensure all Vancouver Games events and venues can be reached by public transit at an affordable cost</td>
</tr>
<tr>
<td></td>
<td>Minimize any potential adverse transportation impacts on inner-city residents</td>
</tr>
</tbody>
</table>
VITA AUCTORIS

NAME: Matthew S. Leixner  
PLACE OF BIRTH: Windsor, ON  
YEAR OF BIRTH: 1993  
EDUCATION: Vincent Massey Secondary School, Windsor, ON, 2011  

University of Windsor, BHK., Windsor, ON, 2015